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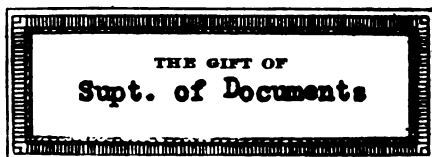
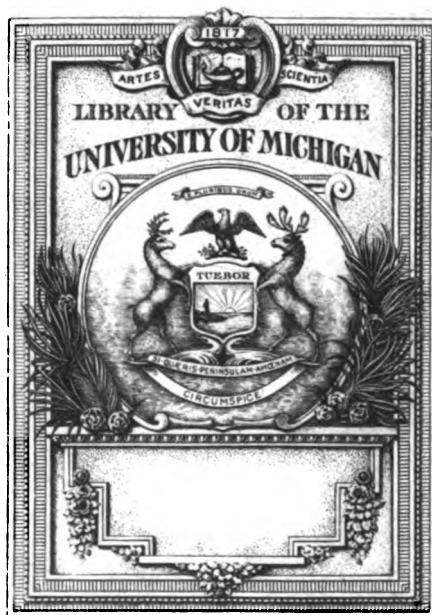
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CONTENTS.—Proceedings of associations—Educational history and biography—Current educational conditions—Education and the war—Educational theory and practice—Educational psychology: Child study—Educational tests and measurements—Special methods of instruction—Special subjects of curriculum—Rural education—Secondary education—Teachers: Training and professional status—Higher education—School administration—School management—School architecture—School hygiene and sanitation—Physical training—Play and playgrounds—Social aspects of education—Child welfare—Moral education—Religious education—Manual and vocational training—Vocational guidance—Agricultural education—Commercial education—Professional education—Civic education—Americanization of immigrants—Military training—Education of soldiers—Education of women—Indian education—Education of blind and deaf—Education extension—Libraries and reading—Bureau of Education: Recent publications.

NOTE.

The record comprises a general survey in bibliographic form of current educational literature, domestic and foreign, received during the monthly period preceding the date of its publication.

This office can not supply the publications listed in this bulletin, other than those expressly designated as publications of the Bureau of Education. Books, pamphlets, and periodicals here mentioned may ordinarily be obtained from their respective publishers, either directly or through a dealer, or, in the case of an association publication, from the secretary of the issuing organization. Many of them are available for consultation in various public and institutional libraries.

Publications intended for inclusion in this record should be sent to the library of the Bureau of Education, Washington, D. C.

PROCEEDINGS OF ASSOCIATIONS.

1860. Arkansas state teachers' association. Proceedings of the fiftieth annual session. . . Little Rock, April 4-6, 1918. Little Rock, Ark., H. G. Pugh printing company, 1918. 126p. 8°. (Educational bulletin, vol. 2, no. 4, vol. 3, no. 1, June 1918) (Miss Annie Griffey, secretary, Little Rock, Ark.)

Contains: 1. W. E. Laseter: Making democracy safe through our schools, p. 40-47. 2. J. B. Jewell: Education and democracy, p. 61-67. 3. T. J. Jones: What democracy means to us, p. 73-75. 4. J. C. Futrall: The Smith-Hughes act, p. 87-92.

1861. **Michigan schoolmasters' club.** Journal . . . fifty-third meeting, held in Ann Arbor, March 28-29, 1918. Ann Arbor, Mich. [1918] 157p. 8°. (Louis P. Jocelyn, secretary, Ann Arbor, Mich.)

Contains: 1. G. M. Whipple: Experiments in the education of gifted children, p. 8-23. 2. W. N. Stearns: Can Greek come back? p. 24-29. 3. Flora I. MacKenzie: Socializing Latin, p. 32-37. 4. J. W. Scholl: German teaching in our schools during and after the war, p. 41-49. 5. G. S. Lasher: English and the project method, p. 61-67. 6. H. S. Doolittle: A one year course in household chemistry, p. 76-81. 7. S. A. Courtis: The value of measurement to teachers of high school mathematics, p. 87-94. 8. Grace Ellis: War and the physiology teacher, p. 95-100. 9. E. H. Gardner: Teaching business correspondence, p. 105-11. 10. R. D. Calkins: Commercial geography from the regional point of view, p. 113-19. 11. G. M. Whipple: What superintendents and other school administrators ought to know of educational measurement, p. 120-31.

1862. **Mississippi teachers' association.** Proceedings of the thirty-third annual meeting. . . Jackson, Miss., May 2-4, 1918. 61p. 8°. (H. L. McCleskey, secretary, Hattiesburg, Miss.)

1863. **National education association.** Journal of proceedings and addresses of the fifty-sixth annual meeting. . . Pittsburgh, Pa., June 29-July 6, 1918. Journal of the National education association, 3: 79-150, October 1918.

Contains: *General Sessions*.—1. David Snedden: Education toward the formation of moral character, p. 79-84. 2. M. G. Brumbaugh: New world-standards of educational efficiency, p. 84-87. 3. A. F. West: The immortal conflict, p. 87-90. 4. G. S. Hall: Some educational values of war, p. 96-100. 5. D. E. Phillips: The war and university reform, p. 100-103. 6. F. K. Lane: The new Americanism, p. 104-8. 7. W. R. Siders: War-modified education, the teachers, and the schools, p. 115-17. 8. Cora W. Stewart: War-modified education and illiteracy, p. 117-20. 9. Milton Fairchild: Character education, p. 120-22. 10. A. E. Winship: War-modified education and the rise of the common people thru it, p. 123-24.

National Council of Education.—11. A. D. Yocum: Democratic factors in American education, p. 131-33. 12. T. D. Wood: A National program of health education, p. 134-36.

Department of Higher Education.—13. J. H. MacCracken: The bill for a National department of education, p. 137-41. 14. J. P. Munroe: Education after the war, p. 142-45.

EDUCATIONAL HISTORY AND BIOGRAPHY.

1864. **Bradford, Gamaliel.** Mary Lyon. Atlantic monthly, 122: 785-96, December 1918.

Life and character of the foundress of Mount Holyoke college.

1865. **Finegan, Thomas E.** Struggle for free schools in New York. State service (Albany, N. Y.) 2:3-14, November 1918.

Story of a fight which lasted half a century before victory crowned the efforts of the pioneer advocates.

1866. **Jones, Arthur J.** Early schools in Worcester, Mass. Educational administration and supervision, 4: 417-24, October 1918.

Presents some interesting data concerning the schools of Worcester, Mass., brought to light recently by gathering material for a study of the grading system in our schools.

1867. **Larsen, Joakim.** Den danske folkeskoles historie. Copenhagen, J. H. Schultz forlagsboghhandel, 1918. 141 p. 8°.

1868. **Maltby, S. E.** Manchester and the movement for national elementary education 1800-1870. Manchester. University press; London, New York, etc., Longmans, Green & co., 1918. 172 p. charts. 8°. (Publications of the University of Manchester. Educational series no. 8)

1869. Moderator-topics, vol. 39, no. 14, December 5, 1918. (A memorial number to Henry R. Pattengill)
Contains articles on Mr. Pattengill as a factor in education, as superintendent of public instruction, etc.
1870. Muret, Maurice. The education of William II. Atlantic monthly, 122: 848-58, December 1918.
Sketches briefly in a fair-minded and sympathetic spirit the education received by the former Kaiser of Germany.
1871. O'Shea, M. V. President Van Hise and the University of Wisconsin. Wisconsin journal of education, 50: 276-79, December 1918.
1872. Schuetz, Brother John J. The origin of the teaching brotherhoods. Washington, D. C., 1918. 104 p. 8°.
A dissertation submitted to the faculty of philosophy of the Catholic university of America in partial fulfillment of the requirements for the degree of doctor of philosophy.

CURRENT EDUCATIONAL CONDITIONS.

GENERAL AND UNITED STATES.

1873. Bizzell, W. B. and Duncan, M. H. Present day tendencies of education. Chicago, New York, Rand McNally & company [1918] x, 256p. 12°.
1874. Claxton, Philander P. [Education in mill villages.] In Cotton manufacturers association of North Carolina. Proceedings, 1918. p. 53-60. (Issued from the secretary's office, 302 Law building, Charlotte, N. C.)
1875. Education in the United States. Times educational supplement (London) 9: 465-66, 480, 492, 504, 516, October 31, November 7, 14, 21, 28, 1918.
I. Education of a democracy.—II. Elementary education.—III. Secondary education.—IV. Rural education.—V. Vocational education.
1876. Fichandler, Alexander. New schools for old. Arbitrator, 1: 7-11, September 1918.
Comments by Professor West and Mr. Fichandler, p. 11-13.
Outlines a program for education conducive to the best interests of democracy.
1877. General education board. The Gary public schools. New York, General education board, 1918. plates. 12°.
The results of this study of the Gary public schools, undertaken on the invitation of the superintendent and the Board of education of Gary, are to be published in eight parts, of which the following have so far been received:
1. The Gary schools: a general account; by Abraham Flexner and Frank P. Bachman. 265p.
2. Organization and administration; by George D. Strayer and Frank P. Bachman. 126p. tables.
3. Costs, school year 1915-1916; by Frank P. Bachman and Ralph Bowman. 86p. tables.
4. Industrial work; by Charles R. Richards. 204p. tables.
5. Household arts; by Eva W. White. 49p. tables.
1878. Lane, Franklin K. Annual report of the secretary of the interior for the fiscal year ended June 30, 1918. Washington, Government printing office, 1918. 193p. 8°.
Discusses present conditions and prospects with reference to education as a national concern, education of native-born illiterates, negroes, and the foreign-born, and Americanization.
1879. Ogden, B. M. Prospective changes in educational standards and ideals. School and society, 8: 661-66, December 7, 1918.
Read before the Interstate schoolmasters' club, at Elmira, N. Y., October 12, 1918.
Says that "the problem before us is so to adjust our programs that the introduction of the vocational training may give us a new outlook upon culture. Thus may the cultural courses be revived and retained as a necessary complement to the more practical training that is demanded of us."

1880. **Ohlinger, Gustavus.** Prussianizing American schools. *Bookman*, 48: 415-22, December 1918.
Presents some features of the German propaganda movement in the United States preceding the great war.
1881. **Sears, Louis M.** Some trends in business and education. *Education*, 89: 193-201, December 1918.
Work of the schools in extending ideas on social and political relations; the share of civics in molding the education of the young American.

FOREIGN COUNTRIES.

1882. Educational reform in Germany. *Educational review*, 56: 405-14, December 1918.
Reprinted from the Educational supplement to the London Times, September 19 and 26, 1918.
1883. **Findlay, J. J., ed.** The young wage-earner and the problem of his education. Essays and reports edited by J. J. Findlay with the committee of the Uplands association. London, Sidgwick & Jackson, Ltd., 1918. xiv, 211 p. 12°.
Discusses present conditions in England.
1884. **Herriott, Edouard.** A new age, a new school. *American schoolmaster*, 11: 383-88, November 15, 1918.
Translated from the Manuel general de l'instruction primaire, by R. Clyde Ford, professor of modern languages, State normal college, Ypsilanti, Michigan. The future for education in France.
1885. **Kandel, I. J.** Educational progress in England. *Educational review*, 56: 361-73, December 1918.
A review of the Fisher education bill.
1886. **Maugain, Gabriel.** Les professeurs italiens et la science allemande. II. Le procès de la culture allemande. III. Les sanctions. *Revue internationale de l'enseignement*, 38: 369-85, September-October 1918.
1887. **Montoro, Rafael.** Popular education. *Inter-America*, 2: 79-81, December 1918.
Problem of popular education in Cuba.
1888. **Sakamoto, Kiyeshi.** School life in Japan. School news and practical educator, 32: 184-88, December 1918. illus.
The first of a series of articles.
1889. **Williams, G. Ferrie.** Welsh education in sunlight and shadow. London, Constable and company, ltd., 1918. 310p. 12°.

EDUCATION AND THE WAR.

1890. **Connecticut.** State board of education. War's effects on the high schools of Connecticut. Hartford, Conn., State board of education, 1918. 26p. 8°. (High school bulletin 3, series 1918-1919)
1891. **Corwin, Robert N.** A reconstruction programme. *Yale alumni weekly*, 28: 261-64, November 29, 1918.
Changes in university education that will result from the war.
1892. **Dewey, John.** The problem of secondary education after the war. *Sierra educational news*, 14: 571-72, December 1918.
1893. ——— Vocational education in the light of the world war. Chicago, 1918. [8p.] 8°. (Bulletin no. 4, January 1918)
Read at the convention of the Vocational education association of the Middle West, Chicago, January 25, 1918.
Reorganization of vocational education after the war.

1894. Ettinger, William L. Our schools in war-time. American review of reviews, 58: 636-38, December 1918.
1895. Gayler, G. W. The reorganization of our public schools. School and home education, 88: 84-89, December 1918.
Educational reconstruction which must come as a result of the war.
1896. Leo, Brother. How to study the great war. Catholic school journal, 18: 299-300, December 1918.
1897. New York (City) Department of education. A syllabus of the World war for use in the high schools of the city of New York. Adopted by the Board of superintendents. . . . New York city, Department of education, 1918. 104p. 8".
CONTENTS.—1. Roll of honor of the allies, July 4, 1918.—2. The World war.—3. A chronological list of the principal events of the war.—4. A list of war terms and names of places.—5. A brief list of publications for reference.
1898. The schools and the war. School, 30: 142-43, December 5, 1918.
Opinions of leading school men and women of the public school system of New York city—an interesting symposium.
The effect of the war on the public schools and on education in general.
1899. U. S. Council of national defense. Committee on labor. Section on industrial training for the war emergency. How the shortage of skilled mechanics is being overcome by training the unskilled. [Washington, D. C., 1918] 63p. illus. 8".

EDUCATIONAL THEORY AND PRACTICE.

1900. Bagley, William C. The place of duty and discipline in a democratic scheme of education. Teachers college record, 19: 419-30, November 1918.
1901. Baldwin, Edward C. The educator's problem from the business man's standpoint. Elementary school journal, 19: 198-208, November 1918.
Advocates the adequate, scientific training of the child to meet the conditions of life as they exist today.

EDUCATIONAL PSYCHOLOGY: CHILD STUDY.

1902. Fukuya, Shoan Masuzo. An experimental study of attention from the standpoint of mental efficiency; a contribution to educational and social problems. Princeton, N. J., and Lancaster, Pa., Psychological review company [1918] 42p. diagrs., tables. 8". (Psychological review publications, vol. XXV, no. 4. Whole no. 110.)
Studies from the Psychological laboratory of the University of Chicago.
1903. Hug-Hellmuth, H. von. A study of the mental life of the child. Psychoanalytic review, 5: 398-427, October 1918.
Deals with speech and the emotional life of the child. To be continued.
1904. Peterson, Joseph. Experiments in rational learning. Psychological review, 25: 443-67. November 1918.
'A simple experiment without complex apparatus to enable the experimenter to record objectively with a high degree of accuracy all the relevant reactions of the subject.'

EDUCATIONAL TESTS AND MEASUREMENTS.

1905. Alton, Ill. Board of education. Special committee on school survey. Findings and recommendations of the survey of the Alton public schools made during the school year 1917-1918. [Alton, Ill., Melling & Gaskins, 1918] 88p. tables, diagrs. 12".

1906. Feingold, Gustave A. Measuring the results of a modern language examination. *Modern language journal*, 3: 14-20, October 1918.

Test to determine the relative difficulty of the various questions constituting an elementary French examination paper—to determine the reactions of pupils to such a paper.

1907. Flanders, Jesse Knowlton. Mental tests of a group of employed men showing correlations with estimates furnished by employer. [Worcester, Mass., 1918] p. 197-206. tables. 8°.

Reprinted from the *Journal of applied psychology*, September, 1918, vol. II, pp. 197-206.

1908. Handschin, Charles H. A test for discovering types of learners in language study. *Modern language journal*, 3: 1-4, October 1918.

1909. How the army uses individual differences in experience; Trade tests; Development battalions; The rating scale. By various authors. *Psychological bulletin*, 15: 187-206, June 1918.

1910. Irwin, H. N. A preliminary attempt to devise a test of the ability of high school pupils in the mental manipulation of space relations. *School review*, 26: 759-72, December 1918.

Third paper of series. Directions for giving each test.

1911. Lackey, E. E. A scale for measuring the ability of children in geography. *Journal of educational psychology*, 9: 443-51, October 1918.

"This scale is constructed on the same principle as the Ayres spelling scale. Over two hundred geography questions gleaned from six different texts were submitted to 1696 pupils in twelve schools, and on the basis of the results the questions were arranged in groups according to difficulty."

1912. Lister, C. C. and Myers, C. C. An analytic scale of handwriting. *Journal of educational psychology*, 9: 417-31, October 1918.

"A detailed account of the derivation of the new scale for the measurement of handwriting officially adopted for use in New York city schools. It is based on the judgments of experienced teachers of handwriting."

1913. McCall, William A. Measuring the Horace Mann elementary school. *Teachers college record*, 19: 472-84. November 1918.

A summary of the results secured from giving the standard educational tests to the pupils of the Horace Mann school.

1914. Mitchell, David and Ruger, Georgie J. Psychological tests. Revised and classified bibliography. New York city, Bureau of educational experiments, 1918. 116p. 8°. (Bulletin IX)

CONTENTS.—I. Theoretical, historical, and general discussions.—II. Methodology, apparatus, and technique.—III. Group tests.—IV. Results of application.

1915. Terman, L. M. The use of intelligence tests in the army. *Psychological bulletin*, 15: 177-87, June 1918.

1916. ——— The vocabulary test as a measure of intelligence. *Journal of educational psychology*, 9: 452-66, October 1918.

"Thinking has a most intimate connection with words, and it is pertinent to inquire whether range of vocabulary is correlated with degrees of intelligence. This investigation of over 600 school children shows the remarkably high correlation between the two functions of 91 per cent."

1917. Witham, Ernest C. Standard geography test—the World. For fifth grades. *Journal of educational psychology*, 9: 432-42, October 1918.

"A description of the test, and some illustrative results of its application. Its use will enable a teacher to compare the attainments of a class with those of other classes in other schools."

SPECIAL METHODS OF INSTRUCTION.

1918. Lull, Herbert G. Project-problem instruction. School and home education, 38: 79-83, December 1918.

Discusses the relation of recitation to study, pupil activities in the recitation, pupil activities in the supervised study period, teacher activities in the recitation, teacher activities in the supervised study period, etc.

1919. Taylor, B. Tunstall. The moving picture as a method of teaching; especially adaptable to postgraduates. Boston, Jamaica printing company, 1918. 5p. 8°.

Reprinted from the American Journal of orthopedic surgery, vol. xvi, no. 11, November 1918.

SPECIAL SUBJECTS OF CURRICULUM.

ENGLISH AND COMPOSITION.

1920. Garescha, Edward F. The training of writers. Catholic school journal, 18: 301-302, 349-50, December 1918, January 1919.

Commences a series of papers on the developing of writers. In opening, the writer says that "The great essential is getting the pupils to do a great deal of reading, intelligent, appreciative reading, and to do a great deal of writing with a purpose to excel." The second paper deals with the function of the memory lesson.

1921. Pedersen, N. Alvin. Writing themes for magazines and newspapers. Education, 39: 217-24, December 1918.

Advocates among other things student pages or columns in magazines and newspapers.

MODERN LANGUAGES.

1922. Fitz-Gerald, John T. National aspects of modern language teaching in the present emergency. Modern language journal, 3: 49-62, November 1918.

Says that the study of foreign languages in our schools should be determined by pedagogical and scientific reasons rather than by whim. But no foreign language work should be done below the 7th grade.

1923. Hoskins, John Preston. Modern language instruction after the war. School and society, 8: 601-12, November 23, 1918.

Read before the Modern language conference of the National education association, Pittsburgh, July 1918.

1924. Kittson, E. Creagh. Theory and practice of language teaching, with special reference to French and German. London, New York [etc.] Oxford university press, 1918. 186p. 12°.

Bibliography: p. 165-86.

1925. Krause, Carl A. The present status of German in France. Modern language journal, 3: 63-66, November 1918.

Quotations from French journals showing the interest taken in the study of German. The "highest goal of teaching German is to make it serve French (i. e., national) aims."

1926. Lipaky, Abram. A few neglected platitudes on modern language examinations. Modern language journal, 3: 75-79, November 1918.

Among other things says that one of the most frequent sources of irritation in school examinations is the method of scoring, which does not seem to have a real scientific basis.

1927. Mantz, Harold E. Modern languages and literatures in universities. Educational review, 56: 385-98, December 1918.

Urges a division of departments between literature and linguistics.

1928. Schweitzer, Charles and Simonnot, Émile. *Méthodologie des langues vivantes*. Paris, A. Collin, 1917. 296p. 12°.

According to the Educational review, December 1918, p. 438-40, this book gives an unusually complete view of the direct method as a whole, as applied to the entire period of instruction. It differs in manner from previous works by assuming that the controversial period has passed. Considered as a contribution to the solution of problems of modern language instruction in America, the book sets forth with exceptional clearness and definiteness the conditions for successful application of the method.

1929. Whitney, Marian P. National ideals and the teaching of modern languages. *Modern language journal*, 3: 5-13, October 1918.

Advocates teaching young Americans French, German, or Spanish at an age when their oral and verbal memory is keen and when languages come easily.

1930. Wilkins, Ernest H. The place of Italian in the American educational system. New York, 1918. 3p. 8°.

Reprinted from *Il Carroccio* [The Italian review], New York, September 1918.

- Concluding portion of an address delivered before a war time conference of modern language teachers at the meeting of the National education association, Pittsburgh, July 2, 1918.

ANCIENT LANGUAGES.

1931. De Witt, Norman W. Semantic studies in Latin. *Classical journal*, 14: 185-90, December 1918.

"By semantics is meant the systematic and methodical study of the meanings of words and the changes they undergo."

1932. Lund, Fred B. In behalf of the classics. *Harvard graduates' magazine*, 27: 170-75, December 1918.

A plea for the support of the classics by all those who study and love them.

1933. Schmidt, Austin G. The minimum essentials. *America*, 20: 166-67, November 23, 1918.

Minimum essentials, especially in teaching Latin.

1934. Scott, Mrs. George B. Junior high-school Latin; its place in war-modified education. *Classical journal*, 14: 167-75, December 1918.

Says that Latin should not be dropped from the high school courses, but, properly correlated with the English, should become a requirement of the seventh and eighth grades.

1935. Wells, Wesley Raymond. Humanistic studies as compensation for lost transcendental values. *School and society*, 8: 666-72, December 7, 1918.

A defense of humanistic studies by one who is thoroughly in sympathy with the vocational trend of secondary education.

GEOGRAPHY.

1936. Dalla Vedova, G. La geografia nella vita e nella scuola moderna. *Nuova antologia*, 53: 223-33, August 1, 1918.

MATHEMATICS.

1937. Lucas, Mrs. Keith. On teaching mathematics. *Nineteenth century*, 84: 942-58, November 1918.

Experiments in teaching mathematics to small children.

1938. Moore, Charles N. On the disciplinary and applied value of mathematical study. *Education*, 39: 209-16, December 1918.

Presents arguments in favor of the disciplinary value of mathematics, regarded as a training in deductive reasoning. Emphasizes the importance of increasing the scientific accuracy of procedure in every subject of human investigation.

1939. **Remer, Laura, and others.** Arithmetic as a means of teaching war savings and thrift. *Elementary school journal*, 19: 209-23, November 1918.
Shows the possibility of coupling instruction in thrift with the regular work in arithmetic from the primary grades up through the whole elementary school. By Laura Remer, Olive Tilton, and Hazel Webster-Byrnes.

SCIENCE.

1940. **Glenn, Earl B.** General science references for pupil and teacher; a preliminary list. *General science quarterly*, 3: 1-30, November 1918.
1941. **Leavitt, Robert G.** The study of birds and bird life in the schools of New Jersey. September 1918. 28p. 8°. (New Jersey. Department of public instruction)
1942. **Snedden, David.** Current problems of aim in physics teaching. *School and society*, 8: 631-35, November 30, 1918.
Address before the New York physics club, November 3, 1918.

MUSIC AND ART.

1943. **Music supervisors' national conference.** *Journal of proceedings of the eleventh annual meeting . . . Evansville, Ind., April 8-12, 1918.* 228p. 8°. (Miss Mabelle Glenn, secretary, Bloomington, Ill.)
Contains: 1. W. O. Miessner: Music's place in the public school system, p. 53-82. 2. C. H. Farnsworth: Making a music survey, p. 112-25. 3. E. L. Baker: Organisation of the high school chorus, p. 141-45. 4. P. W. Dykema: The relation of the high school chorus to the community at large, p. 149-55. 5. D. R. Gebhart: Economy of time in the teaching of music, p. 160-63. 6. H. C. Davis: The essentials of school music—are we in danger of following fads, p. 163-66. 7. P. W. L. Cox: Music in the junior high school, p. 173-79. 8. Anne McDonough: Community music from the standpoint of education and civics, p. 197-201.
1944. **Winslow, Leon L.** A practical means to picture appreciation. *School arts magazine*, 18: 187-93, December 1918.
The stages in appreciation, conscious sense interpretation, etc.

ELOCUTION.

1945. **Dixon, Margaret H.** Public speaking in the high school. *English journal*, 7: 564-69, November 1918.
Describes results of introduction of public speaking into the Oak Park and River Forest township high school, Oak Park, Ill.

RURAL EDUCATION.

1946. **Galpin, C. J. and James, J. A.** Rural relations of high schools. *American city*, 19: 367-70, November 1918.
Reprinted from Bulletin 288, Agricultural experiment station, University of Wisconsin, Madison, Wis. Illustrated.
1947. **Macdonald, N. C.** Rural school progress; consisting of a series of articles dealing with the problem of rural school betterment. [Bismarck, N. D., Dept. of public instruction] October 1918. 91p. illus. 8°.
A section of the biennial report of the State superintendent of public instruction of North Dakota, giving an account of recent activities in the rural schools of his state.

SECONDARY EDUCATION.

1948. **National association of secondary school principals.** First yearbook. Pub. by the Association, 1918. 87p. 8°. (H. V. Church, secretary, Cicero, Ill.)

Contains: 1. B. F. Brown: President's address [Problems of secondary school principals] p. 4-13. 2. J. B. Davis: Administration of educational and vocational guidance in the junior and senior high schools, p. 13-24. 3. C. H. Judd: The high-school principal as manager, p. 25-32. 4. David Snedden: The high-school principal's place in reorganizing objectives of high-school education, p. 32-36. 5. B. F. Buck: Relations between high schools and universities, p. 36-46. 6. Edward Rynearson: Supervised student activities in the school program, p. 47-50. 7. J. R. Bishop: Measurement tests in first-term geometry, p. 50-56. 8. W. A. Bailey: The administration of quantitative and qualitative credit for high-school work, p. 56-73. 9. I. M. Allen: Experiments in supervised study, p. 73-85.

1949. **Drury, Samuel S.** On the road to competence. *Harvard graduates' magazine*, 27: 161-70, December 1918.

"The purpose of this paper is to emphasize group-management and self-help in a boys' boarding-school."

1950. **Lewis, E. E.** The curriculum of the junior high school. *Midland schools*, 23: 91-92, November 1918.

General characteristics of courses in junior high schools, number of curricula, etc.

1951. **McConaughy, James L.** High school marks and costs in New Hampshire and Vermont. *Educational administration and supervision*, 4: 393-97, October 1918.

Contains tables showing the teaching costs per pupil per year by subjects and by schools.

TEACHERS: TRAINING AND PROFESSIONAL STATUS.

1952. **Alliance of New Jersey women teachers.** Public school teachers' retirement systems in the United States. A compendium of facts. Hoboken, N. J., 1918. 110p. 8°. (Elizabeth A. Allen, president, 70 Hudson street, Hoboken, N. J.)

1953. **Furst, Clyde and Kandel, I. L.** Pensions for public school teachers. A report for the committee on salaries, pensions and tenure, of the National education association. New York city, Carnegie foundation for the advancement of teaching, 1918. 85p. 8°. (Bulletin no. 12)

The social philosophy of pensions, fundamental principles of pensions, present status of teachers' pensions, etc.

1954. **Griffin, Orwin Bradford.** The teachers' association in a city of twelve thousand. *American school board journal*, 57: 37-38, 75, December 1918.

The purposes, program, finances, responsibilities, etc., of a city teachers' association.

1955. **Johns, W. A.** Necessary qualifications of a successful teacher. *Ohio educational monthly*, 87: 474-77, December 1918.

Discusses the following qualifications: right attitude, love for children, character, personality and individuality, scholarship, and desire for service.

1956. **Morris, Wilson C.** The American association of teachers—a forward look. *School and society*, 8: 635-40, November 30, 1918.

Discusses some of the more important things that must be done to better the teaching profession, shows why organization will help in the solution of these problems, and gives something of the nature of these organizations.

1957. National education association. Committee on teachers' salaries, tenure, and pensions. Teachers' salaries and cost of living. The report of the Committee on teachers' salaries, tenure, and pensions, July, 1918. Washington, The National education association, 1918. 71p. 8°.
1958. The professor-errant. Unpopular review, 11: 40-55, January-March 1919. Some kindly humorous observations upon professors and their characteristics. Writer says that as one associates with professors, one sees that they are not marvels of reasonableness—that education has not made them gods after all.
1959. Swain, Joseph. The nation and the crisis in its schools. Educational review, 56: 374-84, December 1918.
Read at the meeting of the National education association at Pittsburgh, Pa., on June 11, 1918.
Discusses the threatened collapse of the teaching profession; the drafting into other work of so many capable teachers; and the injury to the schools in consequence. Advocates higher salaries for teachers.
1960. Tenney, C. W. County institutes for county teachers. Inter-mountain educator, 14: 4-8, November 1918.
The value of the county institute to the rural teacher.
1961. Trial of the Nebraska professors. Educational review, 56: 415-23, December 1918.
Article signed "Jurisconsultus."
Criticises the trial of the professors of the University of Nebraska on charges of disloyalty.
1962. Wade, May C. A new basis for salary adjustment. Western journal of education, 24: 6-7, November 1918.
The adjustment of salaries on the basis of training and experience.
1963. Walker, E. G. The normal school curriculum for elementary teachers. Ohio educational monthly, 67: 477-80, December 1918.
Says that the course of study for the normal schools of Ohio needs radical revision and gives the controlling principles for organising such a course.

HIGHER EDUCATION.

1964. Farnam, Henry W. The balance wheels of America. Yale review, 8: 254-71, January 1919.
The "balance wheels" discussed by the writer are the colleges and college men. Beginning with moderate and just praise of what the colleges did to help win the war, he passes on to their important peace work, which will be largely in the way of intelligent public activity.
1965. Graves, Frank P. The evolution of our universities. School and society, 8: 691-702, December 14, 1918.
A lecture given at the University of Pennsylvania, November 16, 1918.
Also in Pennsylvania gazette, 17: 179-80, November 27, 1918.
1966. Hyde, James H. L'université Harvard. Revue internationale de l'enseignement, 38: 321-54, September-October 1918.
A lecture delivered at the Université des annales, Paris.
1967. Lee, John. Drafted universities. Nation, 107: 695-97, December 7, 1918.
Discussion of Students' army training corps. Effects of militarism upon research work and liberty of expression.
1968. Meiklejohn, Alexander. The colleges and the S. A. T. C. Nation, 107: 697-98, December 7, 1918.
From a report presented to the trustees of Amherst college by President Meiklejohn on November 7.

1969. The need for a modern university. *New republic*, 17: 130-32, November 30, 1918.
Article signed "Philonous."
Emphasizes research work; importance of freedom in academic teachings, etc. Advocates abolishing the lecture system.
1970. Ogden, H. N. The purpose of research. *Science*, 48: 525-32, November 29, 1918.
Discusses the call from industry for help in solving important industrial problems. What the duty of the university is in the matter.
Presidential address, Alpha chapter, Sigma Xi society, April 20, 1918.
1971. Powell, Burt E. Semi-centennial history of the University of Illinois. Volume I. The movement for industrial education and the establishment of the university 1840-1870. With an introduction by Edmund J. James. Urbana, The University of Illinois, 1918. xxii, 631p. plates. 8°.
1972. S., M. Impressions d'université américaine. *Revue de l'enseignement des langues vivantes*, 35: 393-97, November 1918.
Some experiences of a Frenchwoman at Bryn Mawr college.
1973. Stone, Harlan F. University influence. *Columbia university quarterly*, 20: 330-39, October 1918.
The annual address at the opening of Columbia university, September 26, 1918.
1974. Stuart, Henry Waldgrave. Liberal and vocational studies in the college. Stanford university, Cal., The University, 1918. 72p. 4°.
Concludes that our present age being one of social idealism and of increasing application of the resources of nature to human ends, it is essential that our ideal of education and of personal culture should embody, in close and well-balanced cooperation, the liberal and vocational elements.
1975. Thwing, Charles F. Gains and losses of the college revolution. *Independent*, 96: 370-71, December 14, 1918.
Influence of military life on conduct of students, etc.
1976. Upham, A. H. A college experiment in pageant-making. *English journal*, 7: 557-63, November 1918.
Experiment undertaken at Miami university, Oxford, Ohio, to illustrate the history of Miami.
1977. Veblen, Thorstein. The higher learning in America: a memorandum on the conduct of universities by business men. New York, B. W. Huebsch, 1918. 198p. 12°.
Reviewed by Charles A. Beard in the *Dial*, 65: 553-55, December 14, 1918.
1978. La vie universitaire à Paris. Ouvrage publié sous les auspices du Conseil de l'Université de Paris, par Paul Boyer, Maurice Caullery, Alfred Croiset, Maurice Croiset, Émile Durkheim, H. Gautier, Louis Havet, F. Larnau, Ernest Lavisse, Henri Marcel, Edmond Perrier, Maurice Prou, G. H. Roger. Paris, A. Colin, 1918. 231p. plates. 8°.
Intended to introduce the foreign student to the institutions of higher education of Paris. Describes the University of Paris and its various faculties, and also the following establishments: Collège de France, Muséum national d'histoire naturelle, École pratique des hautes-études, École nationale des langues orientales vivantes, École nationale des chartes, École du Louvre.

SCHOOL ADMINISTRATION.

1979. Corson, David B. The all-year school. *Journal of education*, 88: 563-68, December 5, 1918.
A paper read before the New England superintendents, November 15, 1918, in which the superintendent of schools of Newark, N. J., tells of the growth and advantages of all-year schools in that city.

1980. Fairchild, R. W. The measure of the administrator. American school board journal, 57: 23-24, December 1918.
The personal elements and the scholastic qualifications essential to a good school administrator.
1981. Finney, Ross L. Records, accounts, reports, etc., for the village school. American school board journal, 57: 25-27, 35, December 1918.
Gives forms for school records.
1982. Jackson, B. B. All-year school plan. 1918. 4p. 8°.
The author, who is superintendent of public schools of Minneapolis, Minn., tells what the all-year school is, the reasons for it, and the cost of it.
1983. Jernegan, Marcus W. Compulsory education in the American colonies. School review, 26: 731-49, December 1918.
Chapters from the author's forthcoming "History of education in the American colonies." Deals with the history of compulsory education in New England.
1984. Linn, Louis P. The city school superintendent in general legislation. School and society, 8: 654-60, November 30, 1918.
The powers and duties of city school superintendents.
1985. Orr, William. Business methods and standards in education. American school board journal, 57: 29-31, 75, December 1918.
Says that there are at least three elements to be found in any properly conducted commercial, financial, or manufacturing enterprise which could be used to advantage in the educational field, and these elements are system, publicity, and cooperation. Each of these has its place in the organization, administration, and spirit of school work.

SCHOOL MANAGEMENT.

1986. Andrews, William E. Real supervised study. School and home education, 38: 75-79, December 1918.
1987. Church, H. V. The first day. School review, 26: 721-30, December 1918.
Work of registering and advising pupils on their entrance in high school. Gives specimens of cards and blanks.
1988. Hartog, P. J. Examinations and their relation to culture and efficiency. London, Constable and company, ltd. [1918] 145p. 12°.
1989. Nutt, H. W. The duties of an elementary school principal. Elementary school journal, 19: 174-97, November 1918.
A description in detail of the activities "that are actually performed by building principals under varying conditions of school organization and administration."
1990. Pierce, Mary D. The daily program. Virginia journal of education, 12: 93-99, November 1918.
Gives programs for a one-teacher, two-teacher, and three-teacher school.
1991. Snyder, Edwin R. Elimination of waste in education. California blue bulletin, 4: 9-12, September 1918.
1992. Young, Walter H. The relation of instruction to discipline. Education, 39: 231-37, December 1918.
Third paper of series. Deals with interest and discipline; interest and attention; motivation and sources of motivation.

SCHOOL ARCHITECTURE.

1993. Switzer, C. F. Bringing the old plant up-to-date. American school board journal, 57: 33-34, December 1918.
Tells how a well-constructed building of the early '90s has been adapted to the present-day needs of the Grand Rapids junior high school.

1994. U. S. Federal board for vocational education. Buildings and equipment for schools and classes in trade and industrial subjects. Washington, Government printing office, 1918. 77p. illus. 8". (Bulletin no. 20. Trade and industrial series no. 4)

SCHOOL HYGIENE AND SANITATION.

1995. Baten, C. E. Your classroom. *Journal of education*, 88: 495-96, November 14, 1918.
Takes up the questions of ventilation, lighting, etc.
1996. Kauffman, Treva E. School lunch work in Ohio. *Journal of home economics*, 10: 490-94, November 1918.
The plans for school lunch work used in the small rural school, the larger rural school, the county normal school and the city public school in Ohio.

PHYSICAL TRAINING.

1997. Hill, Laurence S. Physical education in rural schools. *Mind and body*, 25: 285-90, November 1918.
Read before the Physical education department of the National education association, Pittsburgh, Pa., July 2, 1918.
1998. Leonard, Fred E. Physical education in Denmark. Published by the Society of directors of physical education in colleges, 1918. 37p. 8". (Studies in the history of physical education)
1999. Storey, Thomas S. Physical training an essential to the better health defense of society. *Mind and body*, 25: 273-78, November 1918.
A discussion of the New York state program of physical training.

PLAY AND PLAYGROUNDS.

2000. Leonard, Fred E. The playground movement in Germany. Published by the Society of directors of physical education in colleges, 1918. 16p. 8". (Studies in the history of physical education)
2001. Thames, Grover C. Play—a physical developer. *Southern school work*, 7: 207-10, December 1918.

SOCIAL ASPECTS OF EDUCATION.

2002. North, Samuel M. A social program for secondary schools. *American physical education review*, 23: 469-74, November 1918.
Address delivered at the twenty-second convention of the American physical education association, April 12, 1918.
The introduction of properly supervised extra-class activities in the secondary schools.
2003. Stevenson, John. Educating the child at home. *America*, 20: 221-22, December 7, 1918.
Says that every mother who does not have to work to support her children, should herself teach them until they are prepared to enter the third grade in our grammar schools and can, with credit to the mothers and themselves, take their places in these schools.
2004. Wahlstrom, Leonard W. Christmas toy making as a community center activity. *Manual training magazine*, 20: 117-20, December 1918.
The making of toys by the parents of the children of the Francis W. Parker school as a community center activity.

CHILD WELFARE.

2005. Brandt, Lillian. A program for child protection. Survey, 41: 338-42, December 14, 1918.
Report of the fourteenth National conference on child labor, December 7, 1918. Among other matters discusses the "education bill" (Senate bill No. 4987) to create a federal department of education, with a secretary of cabinet rank. Work of Children's bureau, etc.
2006. Carlisle, Chester Lee. The causes of dependency based on a survey of Oneida county. Albany, N. Y., 1918. 465p. 8°. (New York State board of charities. Division of mental defect and delinquency. Bureau of analysis and investigation. Eugenics and social welfare bulletin, no. 15)
Includes chapters on the following topics: Children in the public schools, Children in institutions, The delinquent child.
2007. Missouri. Children's code commission. Report . . . A complete revision of the laws for the welfare of Missouri children, 1918 . . . [Jefferson city, The Hugh Stephens co., printers, 1918] 231p. 8°.
2008. National child labor committee. Child welfare in Alabama; an inquiry by the National child labor committee under the auspices and with the cooperation of the University of Alabama. New York, National child labor committee [1918] 249p. 8°.
Contains sections by different authors on the following topics: Public health, Education, Rural school attendance, Child labor law administration, Juvenile courts and probation. Child-caring institutions and home finding. Recreation, Law and administration (recommendations and general discussion).
2009. United States. Children's bureau. Back-to-school drive . . . Prepared in collaboration with the Child conservation section of the field division, Council of national defense. 1918. 8p. 8°. (Children's year leaflet no. 7. Bureau publication no. 49)
Increasing number of children leaving school; child labor not needed in essential war industries, experience of France and England, etc.

MORAL EDUCATION.

2010. Marsh, Clinton S. Moral instruction in the schools of France. Journal of education, 88: 543-44, November 28, 1918.
An outline. The official programs.
2011. Smith, Charles H. A morality code. School science and mathematics, 18: 771-77, December 1918.
Part I deals with children in the adolescent period and part II with youths in their teens.

RELIGIOUS EDUCATION.

2012. Catholic educational association. Report of the proceedings and addresses of the fifteenth annual meeting, San Francisco, Cal., July 22-25, 1918. Columbus, Ohio, Catholic educational association, 1918. 642p. 8°. (Catholic educational association bulletin, vol. 15, no. 1, November 1918) (Rev. Francis W. Howard, secretary, 1651 East Main street, Columbus, Ohio)
Contains: 1. P. C. Yorke: The teaching of religion, p. 56-60. 2. E. A. Pace: The place of the university in national life, p. 81-92. 3. R. H. Smith: Our country and our schools, p. 98-102. 4. F. T. Moran: Education and democracy, p. 108-9. 5. U. Lewis: Orientation of content in mathematical text-books for colleges and high schools, p. 174-87. 6. James Conlon: Catholic college education on the Pacific coast, p. 187-208. 7. Zacheus Maher: The coordination of language study, p. 208-11; Discussion, p. 211-17. 8. A. C. Fox: Departments of education in Catholic colleges and universities, p. 217-28. 9. C. B. Moulinier: Professional education in Catholic institutions, p. 228-31. 10.

Mary A. Molloy: Catholic colleges for women, p. 233-47. 11. Brother Leo: The feeling for literature, p. 282-91. 12. J. A. Dillon: The junior high school plan, p. 292-301. 13. W. J. McAuliffe: The significance and value of examinations, p. 302-9. 14. E. A. Pace: Training children to study, p. 350-56. 15. Zephyrin Englehardt: Catholic educational work in early California, p. 359-74. 16. John Garvin: The tests of a teacher's efficiency, p. 374-94. 17. P. J. McCormick: Methods of teaching religion, p. 394-403. 18. George Banzer: The Sunday school, p. 408-20. 19. Z. Joseph: The training of a teacher, p. 423-67. 20. Joseph Schrembs: Catholic education and after-the-war problems, p. 471-75. 21. John Waldron: Keeping in touch with educational movements, p. 476-90. 22. William Power: Some modern fallacies in the matter of education, p. 490-517. 23. Ralph Hunt: The parish school a work of missionary zeal, p. 520-28. 24. Joseph Gallagher: The organization of our educational work, p. 528-60. 25. Catholic high schools and secular universities, p. 560-67. 26. C. R. Baschab: The psychology of habit, p. 570-81. 27. P. J. Keane: Some financial aspects of the parish school, p. 583-91.

2013. International Sunday school association. Educational bulletins, nos. 1-8. Chicago, International Sunday school association, 1918. 8 v. 8°.

Contents: 1. The educational policy of the International Sunday school association.—2. Making democracy safe for the world, by Walter S. Athearn.—3. The urgent need of a national program of religious education, by M. A. Honline.—4. The organization of religious education within the community, by Walter S. Athearn.—5. Teacher training,—needs, methods, and international policy, by M. A. Honline.—6. An annotated bibliography of texts and reference books for community training schools, prepared by M. A. Honline and Walter S. Athearn.—7. Suggestions for the guidance of directors of community schools of religious education, by Walter S. Athearn.—8. International standards for community training schools of religious education, by Walter S. Athearn.

2014. Pendleton, Charles S. Teaching the Bible in the junior high school. English journal, 7: 623-36, December 1918.

An actual, practical procedure in teaching the Bible which during the last three years has been developed in the Wisconsin high school of the University of Wisconsin. It will probably be valuable as a suggestion to other schools.

2015. Tidwell, J. B. The Sunday school teacher magnified. New York. London, [etc.] F. H. Revell company [1918] 143p. 12°

MANUAL AND VOCATIONAL TRAINING.

2016. Elliott, John L. Poor Richard's grandsons. Survey, 41: 215-18, November 23, 1918.

Describes the School for printers' apprentices in New York city.

2017. Haney, James Parton. Our future in industrial arts. American education, 22: 161-63, December 1918.

The need for developing industrial art education in the United States.

2018. How federal, state, and local governments are cooperating to promote trade and industrial education. American city, 19: 456-60, December 1918.

2019. King, Charles A. The workman's opportunity. Industrial-arts magazine, 7: 445-48, December 1918.

Speaks of the demand for teachers of the manual arts and the workman's opportunity to prepare himself for such work.

2020. Boesch, Sister Mary Jeanette. Vocational preparation of youth in Catholic schools. Washington, D. C., June 1918. 73p. 8°.

A dissertation submitted to the Catholic sisters college of the Catholic university of America in partial fulfillment of the requirements for the degree of doctor of philosophy.

Causes leading to the introduction of vocational education in the state schools, an outline of the history of vocational education in Catholic schools, and ways and means of improvement in the development and guidance of vocation in Catholic schools.

- 2021. Weeks, Ruth Mary.** Making American industry safe for democracy. Chicago, 1918. [7]p. 8°.
 Read at the convention of the Vocational education association of the Middle West, Chicago, January 25, 1918.
 The writer says that the problem of public education is to make American industry a democratic institution.

VOCATIONAL GUIDANCE.

- 2022. Cohen, I. David.** Vocational guidance in New York city. Educational foundations, 30: 173-80, December 1918-January 1919.
 Tells of the prevocational school, continuation classes, trade extension tests, etc.
- 2023.** Vocational guidance in secondary education. Industrial-arts magazine, 7: 432-33, 472-76, November, December 1918.
 An important report on a plan for making vocational guidance an integral part of American high schools.

AGRICULTURAL EDUCATION.

- 2024. Frazer, Oren E.** Agriculture as presented by some of the state normal schools. School science and mathematics, 18: 820-27, December 1918.
 A summarized report based upon information received from 80 state normal schools in response to a questionnaire.
- 2025. U. S. Federal board for vocational education.** Agricultural education. Some problems in state supervision. Washington, Government printing office, 1918. 32p. 8°. (Bulletin no. 26, Agricultural series no. 4, December 1918)

COMMERCIAL EDUCATION.

- 2026. Lyon, Leverett S.** The business-English situation in the secondary schools. English journal, 7: 576-87, November 1918.
- 2027. MacElwee, R. S.** Education for foreign trade and shipping in high schools. School and society, 8: 612-16, November 23, 1918.
 What to teach, when to teach it, and contact with the job.
- 2028. Slinker, Clay D.** Some measurements in commercial education. Business educator, 24: 21-24, December 1918.
- 2029. U. S. Federal board for vocational education.** Retail selling. Washington, Government printing office, 1918. 95p. 8°. (Bulletin no. 22, Commercial education series no. 1, October 1918)
 Outlines of courses, etc.
- 2030. U. S. Federal board for vocational education.** Vocational education for foreign trade and shipping. Washington, Government printing office, 1918. 85p. 8°. (Bulletin no. 24, Commercial education series no. 2, November 1918)
- 2031. Upton, Clifford Brewster.** The secret of thrift. A new Aladdin's lamp for every boy and girl. Teachers college record, 19: 431-60, November 1918.
 "The aim of this article is to present in a new light certain facts about systematic saving and investment, an important element of thrift. The article is addressed to boys and girls merely to suggest one possible way of making a somewhat difficult topic interesting to school children."
- 2032. Villalbi, Pedro Gual.** La educacion comercial de nuestro pueblo. Madrid, Imprenta A. M. San Hermenegildo, 1917. 282p. illus. 12°.

PROFESSIONAL EDUCATION.

2033. **Cuche, Paul.** Facultés et écoles de droit. Quelques économies faciles. *Revue internationale de l'enseignement*, 38: 355-68, September-October 1918.

Discusses a proposed reorganization of legal education in France.

2034. **Leclerc, Max.** La formation des ingénieurs à l'étranger et en France, nos instituts techniques, nos grandes écoles. Paris, A. Colin, 1917. 142p. 12°.

CIVIC EDUCATION.

2035. **Barnard, J. Lynn.** A program of civics teaching for war times and after. *Historical outlook*, 9: 492-500, December 1918.

Suggested readings: p. 499-500.

2036. **Clarke, Kate Upson.** Teaching the child patriotism. Boston, The Page company, 1918. 175p. 12°.

2037. **Ruiz Amado, Ramón.** Educación cívica. Barcelona, Librería religiosa, 1918. 208p. 12°.

2038. **Boss, A. Franklin.** American ideals: how to teach them. *Educational review*, 56: 399-404, December 1918.

2039. **Smith, Edwin B.** A study in citizenship. *Historical outlook*, 9: 503-7, December 1918.

An outline for a study in citizenship with the emphasis on war conditions and the responsibilities associated with them.

AMERICANIZATION OF IMMIGRANTS.

2040. **Cody, Frank.** Americanization courses in the public schools. *English journal*, 7: 615-22, December 1918.

By the assistant superintendent of schools, Detroit, Mich., describing the system of instructing immigrants in the public schools of that city.

2041. **Kellor, Frances A.** What is Americanization? *Yale review*, 8: 282-99, January 1919.

Americanization is the process of guaranteeing the following fundamental requisites to each man, native and foreign-born alike: Opportunities to better conditions, to be equal to other men, to have the right to be heard, freedom of thought, worship, and speech, and to enjoy life, liberty, and the pursuit of happiness. Just in proportion as the English language and citizenship interpret these requisites, they are Americanization agencies.

2042. **Levine, Albert J.** How New York is making Americans. *Educational foundations*, 30: 149-54, December 1918-January 1919.

Problems in Americanization from a pedagogical point of view.

MILITARY TRAINING.

2043. **Manley, Louis K.** Army education in war issues. *Engineering education*, 9: 88-93, November 1918.

2044. **Schmidt, Austin G.** Inimitable aspects of military discipline. *America*, 20: 192-93, November 30, 1918.

Says in conclusion that "If the Students' army training corps makes us realize that we must have more uniformity of method, more unity of authority, and a more telling sanction for the law, it will cause the greatest and most healthful revolution that ever took place in the field of pedagogy."

EDUCATION OF SOLDIERS.

2045. **Erskine, John.** Educational opportunities for our army abroad. *Columbia university quarterly*, 20: 353-64, October 1918.

The educational plans that have been worked out in France for our boys while they are waiting for demobilization.

2046. Orr, William. Sending the army to school. Evening post magazine, December 14, 1918, p. 2, 4.
"Overseas university" of the Y. M. C. A. plans to use 2,000 teachers and millions of textbooks in educating our troops in France during the demobilization period.
2047. Stokes, Anson Phelps. Educational plans for the American army abroad. New York, Association press, 1918. 124p. 12".
The reports presented to and approved by General Pershing, with supplementary reports showing progress of the work, by Professor John Erskine of Columbia university and Professor Reginald Aldworth Daly of Harvard university.
2048. Teaching the soldier. Outlook, 120: 530-31, December 4, 1918.
Work of the Army education commission: Courses given in barracks, "Y" huts, etc.
2049. U. S. War department. Office of the provost marshal general. Boards of instruction. Bulletin no. 6. Teaching English to non-English speaking selectives. Washington, Government printing office, 1918. 29p. 8".

EDUCATION OF WOMEN.

2050. Austin, Mary. The young woman citizen. New York, The Woman's press, 1918. 186p. 12".
Bibliography: p. 170-86.
2051. Greenberg, Benjamin C. What girls want to know. School review, 26: 750-58, December 1918.
Teaching school hygiene at the Julia Richman high school, New York city.
2052. Robinson, Helen Ring. Preparing women for citizenship. New York, The Macmillan company, 1918. 180p. 12".

INDIAN EDUCATION.

2053. Lipps, Oscar H. Education and culture: the Indian school curriculum. Indian school journal, 19: 85-93, November 1918.

EDUCATION OF BLIND AND DEAF.

2054. Avondino, Josephine. The babbling method. Volta review, 20: 667-71, 767-71, November, December 1918.
A system of syllable drills for the natural development of speech. To be continued.
2055. Clark, Juliet D. and Walker, Jane B. Lessons in lip-reading for deaf soldiers (Nitchie method). Volta review, 20: 681-84, November 1918.
Continued from October number.

EDUCATION EXTENSION.

2056. Arnold, Frank B. Play service in Utah. Education, 39: 244-48, December 1918.
Describes the play service bureaus of the State colleges of North Dakota and of Utah. Recommends dramas suitable for amateur presentation.
2057. Sterns, F. H. The place of the museum in our modern life. Scientific monthly, 7: 545-54, December 1918.
The educational evaluation of the museum.

LIBRARIES AND READING.

2058. Curtis, Florence Rising. The libraries of the American state and national institutions for defectives, dependents, and delinquents. Minneapolis, University of Minnesota, 1918. 56p. 8". (University of Minnesota. Studies in the social sciences, no. 13)

2059. The public library in the small town. I. How not to do it. II. How to do it (by another author). Unpopular review, 11:134-49, January-March 1919.

BUREAU OF EDUCATION: RECENT PUBLICATIONS.

2060. Cardinal principles of secondary education. A report of the Commission on the reorganization of secondary education, appointed by the National education association. Washington, 1918. 32p. (Bulletin, 1918, no. 35)
2061. Educational directory, 1918-19. Washington, 1918. 247p. (Bulletin, 1918, no. 36)
2062. Educational survey of Elyria, Ohio. Washington, 1918. 300p. (Bulletin, 1918, no. 15)
2063. The educational system of South Dakota. Washington, 1918. 304p. (Bulletin, 1918, no. 31)
2064. Effect of war conditions on clothing and textile courses. Washington, 1918. 7p. (Home economics circular no. 7, October 1918)
2065. Industrial education in Wilmington, Delaware. Report of a survey made under the direction of the Commissioner of education. Washington, 1918. 102p. (Bulletin, 1918, no. 25)
2066. A manual of educational legislation for the guidance of committees on education in the state legislatures; prepared under the direction of the Rural division. Washington, 1919. 68p. 8°. (Bulletin, 1919, no. 4)
2067. Opportunities at college for returning soldiers. Washington, 1918. 29p. (Higher education circular no. 12, December 1918)
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2069. Reading course for kindergarten teachers. Washington, 1918. 3p. (Kindergarten division. Reading course)
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2071. Report of the Commissioner of education for the year ended June 30, 1918. Washington, 1918. 155p.
- CONTENTS.—Letter of transmittal.—I. Some aspects of education in the United States.—II. Education in certain foreign countries.—III. Activities of the Bureau of education.
2072. Rural-teacher preparation in state normal schools; by Ernest Burnham. Washington, 1918. 77p. (Bulletin, 1918, no. 27)
2073. Teaching American ideals through literature; by Henry Neumann. Washington, 1918. 21p. (Bulletin, 1918, no. 32)
2074. Wanted. Teachers to enlist for child health service. Washington, 1918. 8p. (Health education, no. 1)

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- America, 59 East Eighty-third Street, New York, N. Y.
- American annals of the deaf, 2419-2421 Greenmount Avenue, Baltimore, Md.
- American city, 93 Nassau Street, New York, N. Y.
- American college bulletin, 19 South La Salle Street, Chicago, Ill.
- American education, 50 State Street, Albany, N. Y.
- American journal of care for cripples, 2929 Broadway, New York, N. Y.
- American journal of nursing, 2419-2421 Greenmount Avenue, Baltimore, Md.

American journal of psychology, Clark university, Worcester, Mass.
 American journal of public health, 289 Fourth Avenue, New York, N. Y.
 American journal of school hygiene, Worcester, Mass.
 American journal of theology, University of Chicago Press, Chicago, Ill.
 American magazine of art, 1741 New York Avenue, Washington, D. C.
 American motherhood, Cooperstown, N. Y.
 American physical education review, 93 Westford Avenue, Springfield, Mass.
 American review of reviews, 30 Irving Place, New York, N. Y.
 American school board journal, 354 Milwaukee Street, Milwaukee, Wis.
 American schoolmaster, State normal school, Ypsilanti, Mich.
 Americanization bulletin, Bureau of Education, Washington, D. C.
 Annals of the American academy of political and social science, Woodland Avenue and Thirty-sixth Street, Philadelphia, Pa.
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 Asia, 627 Lexington Avenue, New York, N. Y.
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 Bookman, 244 Madison Avenue, New York, N. Y.
 Boston medical and surgical journal, 101 Tremont Street, Boston, Mass.
 Bulletin of the American institute of banking, 5 Nassau Street, New York, N. Y.
 Bulletin of the Pan-American union, Washington, D. C.
 Business educator, Columbus, Ohio.
 California blue bulletin, State department of education, Sacramento, Cal.
 Catholic educational review, Washington, D. C.
 Catholic school journal, 445 Milwaukee Street, Milwaukee, Wis.
 Child, London, England.
 Child labor bulletin, 105 East Twenty-second Street, New York, N. Y.
 Christian register, 6 Beacon Street, Boston, Mass.
 Classical journal, University of Chicago press, Chicago, Ill.
 Classical weekly, Barnard college, New York, N. Y.
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 Columbia university quarterly, Columbia university, New York, N. Y.
 Constructive quarterly, 244 Madison Avenue, New York, N. Y.
 Contemporary review, 249 West Thirteenth Street, New York, N. Y.
 Current education, St. Martins, Philadelphia, Pa.
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 Dial, 152 West Thirteenth Street, New York, N. Y.
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 Educational administration and supervision, Warwick and York, inc., Baltimore, Md.
 Educational exchange, Birmingham, Ala.
 Educational foundations, 31-33 East Twenty-seventh Street, New York, N. Y.
 Educational review, Columbia university, New York, N. Y.
 Educator-journal, 408 Newton Claypool building, Indianapolis, Ind.
 Elementary school journal, University of Chicago press, Chicago, Ill.
 Engineering education, Bulletin of the Society for the promotion of engineering education, Lancaster, Pa.
 English journal, University of Chicago press, Chicago, Ill.
 Evening post magazine, 20 Vesey Street, New York, N. Y.
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 Garden magazine, Doubleday, Page and company, Garden City, N. Y.
 General science quarterly, Salem, Mass.
 Grande revue, Paris, France.

- Harvard graduates' magazine, Exchange Building, Boston, Mass.
 High school journal, Chapel Hill, N. C.
 Historical outlook, *formerly* History teacher's magazine, McKinley publishing company, Philadelphia, Pa.
 Independent, 119 West Fortieth Street, New York, N. Y.
 Indian school journal, Chilocco, Okla.
 Industrial-arts magazine, 129 Michigan Street, Milwaukee, Wis.
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 National geographic magazine, Hubbard memorial hall, Washington, D. C.
 National school service, Department of the Interior, Washington, D. C.
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 New republic, 421 West Twenty-first Street, New York, N. Y.
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 Normal instructor and primary plans, Dansville, N. Y.
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 Nuova antologia, Rome, Italy.
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 Ohio educational monthly, Columbus, Ohio.
 Ohio teacher, Columbus, Ohio.

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 Scientific monthly, The Science press, Garrison, N. Y.
 Scribner's magazine, 597 Fifth Avenue, New York, N. Y.
 Sierra educational news, San Francisco, Cal.
 Southern school work, Alexandria, La.
 Southern workman, Hampton, Va.
 State service, Lyon Block, Albany, N. Y.
 Survey, 112 East Nineteenth Street, New York, N. Y.
 Teachers college record, Teachers college, Columbia university, New York, N. Y.
 Teacher's Journal, Marion, Ind.
 Teaching, Emporia, Kans.
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 Unpopular review, 19 West Forty-fourth Street, New York, N. Y.
 Utah educational review, Salt Lake City, Utah.
 Virginia journal of education, Richmond, Va.
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- No. 1. Monthly record of current educational publications, January, 1919.
- No. 2. Standardization of medical inspection facilities. J. H. Berkowitz.
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- No. 41. An educational study of Alabama.
- No. 42. Monthly record of current educational publications, June, 1919.

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 2

STANDARDIZATION OF MEDICAL INSPECTION FACILITIES

A CONTRIBUTION TO MODERN
SCHOOLHOUSE PLANNING

By

J. H. BERKOWITZ

BUREAU OF WELFARE OF SCHOOL CHILDREN, NEW YORK
ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR



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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,

BUREAU OF EDUCATION,

Washington, D. C., May 20, 1919.

SIR: The great war now ended has shown to every nation the priceless value of the health of its citizens. The beginnings of the health supervision of schools and school children, made before the war, are now seen as movements of the greatest significance for national conservation. The growth of school health supervision in the United States in the past few years is indicative of its certain development in the years immediately ahead. The first definite legislation was in Massachusetts in 1906. By 1912 there was, in 19 States, some form of statutory provision for school health supervision. The number had increased to 26 in 1915. Similarly there is recorded a constantly increasing number of cities providing organized health supervision of school children. This increase in extent is paralleled by the increase in thoroughness and effectiveness; and this increase in thoroughness and effectiveness necessitates the provision not only of an adequate supervisory force of medical inspectors and nurses, but also adequate material equipment.

The manuscript herewith submitted has been prepared by Mr. J. H. Berkowitz after a careful study of the medical inspection facilities in the schools of New York and other American and foreign cities. I recommend that it be published as a bulletin of the Bureau of Education.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

The SECRETARY OF THE INTERIOR.

STANDARDIZATION OF MEDICAL INSPECTION FACILITIES.¹

INTRODUCTORY.

The war is ended, but the problems unveiled by the war must be solved and the needs laid bare by the conflict must be met. The words of Dr. L. Haden Guest,² an English medical officer, written in the trenches in France, indicate clearly one problem and one need:

There is no especial reason for thinking this is the last of all wars. Nor is this kind of war the only kind a nation has to fight; there is the war of commerce, and there is the war of science. Even then if we do not try to unchain the powers of man for the sake of life itself—its vigor, its beauty, its expression—let us at least remember that wars of all kinds are fought better by men and women who, in childhood, were cared for and allowed to be strong, helped to overcome weaknesses. * * * The war has, of course, changed our outlook on most things, but with regard to the children's question, the change is to make one realize even more intensely the dominating importance in national life of all that affects the child. Here [referring to the fighting lines] they are equipped with everything that can be given, but they can not be equipped with a physical health and efficiency greater than their childhood has left them. Only care of childhood can give us adult men of that force and vigor which is latent in our race, but which often bad conditions deform or suppress.

A CHALLENGE FROM NEW SOUTH WALES.

This challenge to the United States appears in the last annual report of the principal medical officer of New South Wales:

There is probably no large area in the United States, whether provincial or other kind, which can boast of having such provisions for the care of physically defective school children as are enumerated below. Much less will one find a record of increase during war time of such provisions as may have existed prior to the war in any American locality.

The writer then enumerates a traveling hospital staffed by two medical officers, a dentist and a nurse; six traveling dental clinics, each staffed by a dentist and a dental assistant; a dental clinic in Sydney staffed by six half-time dentists and three full-time dental assistants; a traveling ophthalmic clinic.

Such "treatment schemes" as these are the outgrowth of medical inspection and can be looked for only where health supervision of school children is firmly established. Unfortunately, no such exten-

¹ A summary of this paper was presented at the Round Table of the Department of Administration, National Education Association, at Pittsburgh, Pa., July 3, 1918.

² *The Nation of the Future: A Survey of Hygienic Conditions and Possibilities in School and Home Life.* By L. Haden Guest. London, G. Bell & Sons (Ltd.), 1916.

sive provision for care of the health of school children can be found in any rural section of this country; but we can accept the challenge with respect to cities, for there is more than one city in the United States with a showing quite as impressive. Too frequently, however, this work with us is merely a work of salvage. The emphasis is upon "care of the physically defective children," rather than upon safeguarding and developing the normal children. Both are equally important.

A PROBLEM FOR EDUCATORS.

The detection of physical defects in school children and the adoption of preventive as well as curative measures are now generally recognized as an essential part of the service of a well-ordered school system. The time has long since passed for discussing the question as to whether the school physician and the school nurse shall have their places in the school along with the teacher.

"The medical examiner, the school nurse, and the district nurse," says President Eliot, "should be regular members of every school system in the country, rural as well as urban, and their work should go on incessantly, not for a few days out of the year but all through the year."

But it is not enough to provide physicians and nurses. A worker of any kind implies a place and tools for the work. The responsibility of providing the workshops and the tools rests upon school authorities. School administrators who are planning new school buildings can commit no more serious error than omission of adequate facilities for the work of health examination and supervision. If they already have medical inspection, the need of such rooms should be apparent to them. If, on the other hand, they do not have medical inspection, they should prepare for the inevitable introduction of that essential service.

STANDARD MEDICAL INSPECTION FACILITIES.

SPECIAL FACILITIES NEEDED.

Our present concern with this phase of modern school administration arises from the need of making adequate provision in the schoolhouse for the work of the medical inspector and nurse, just as we do for the teacher, the principal, the engineer, or any other member of the school staff. This problem of adequate quarters for the health work in the schools loomed up very impressively in the course of intensive investigations made for the Bureau of Welfare of School Children in a number of schools in which certain phases of medical inspection, hygiene, and sanitation were studied in great

¹ Charles W. Eliot. "Certain defects in American Education." Bureau of Education, Teachers' Leaflet No. 5, June, 1918.

detail. Out of the observations then made developed this special study of medical rooms.

An inquiry covering 65 cities in the United States showed 37 cities provided with special rooms for the medical officers in the schools, i. e., rooms set aside for their work and not used for any other

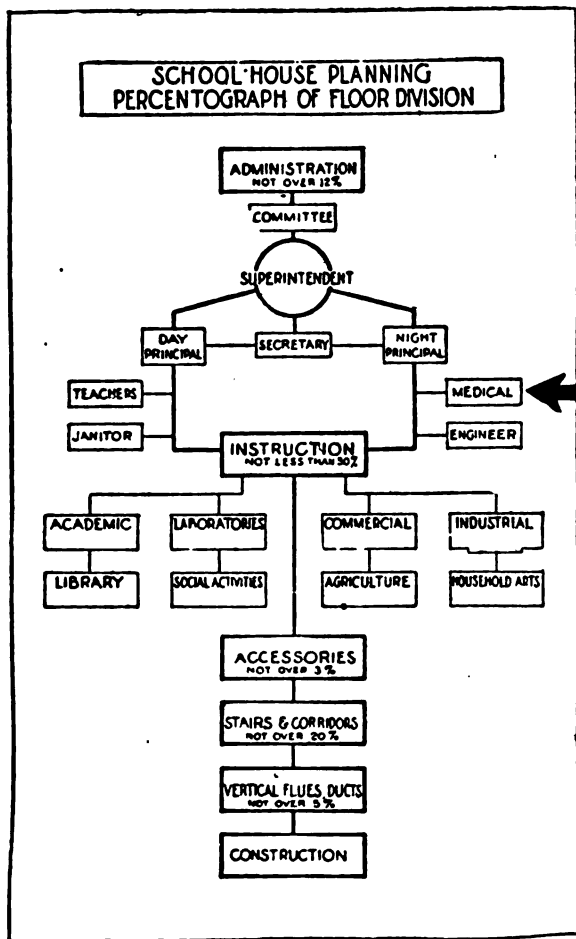


FIGURE 1.—A step toward standardization.

Medical department included under administration in this tentative distribution of floor space formulated by the committee on schoolhouse planning and construction of the National Education Association.

purpose. How many of these were planned by the architects as medical rooms and how many of them are adequate and suited for their purpose, it is impossible to say at present.

The committee on schoolhouse planning and construction of the National Education Association¹ has given careful consideration to

¹ The chairman of this committee, Frank Irving Cooper, has generously consented to the reproduction of the charts—figures 1 and 2.

the medical department in the apportioning of floor space for administrative purposes, as will be seen in figure 1. What might be included under "medical work in a modern, well-planned, well-organized school" is shown in figure 2.

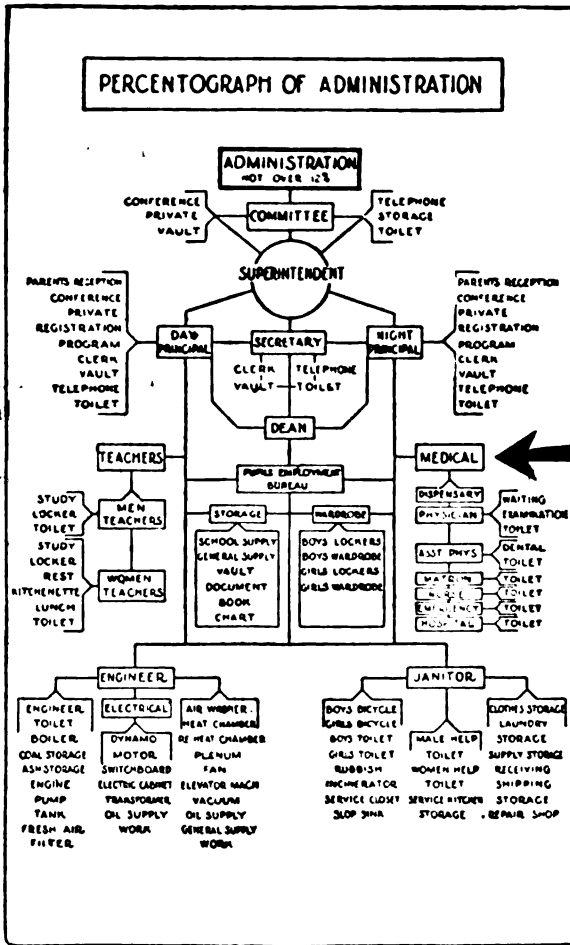


FIGURE 2.—A complete medical department.

In this percentograph of administration, the committee on school-house standardization has indicated a number of possibilities in the way of subdivisions and accessories under "Medical."

Through the courtesy of school architects of three large American cities—New York, St. Louis, and Cleveland—it is possible to show how the problem has been met in these cities and to place some practical suggestions before those who may be in a position to emulate these pioneer efforts.

SIMPLE BUT ADEQUATE PLAN.

In New York City considerable attention has been given to this problem, and in every public-school building recently erected a carefully planned medical inspection room of adequate dimensions has been included. A typical floor plan of the latest type of school building is shown in figure 3. The standard details of the room (figure 4) are worked out in accordance with the following instructions to draftsmen issued by C. B. J. Snyder, superintendent of school buildings and architect of the board of education:

In all buildings there shall be a room for the medical inspector, centrally located, on an intermediate floor and having a lavatory and cabinet.

It shall be subdivided by an office partition so as to form a small waiting room and an inner office.

The general arrangement should be as here shown, the inner and outer doors being at one side and the hinged sash at the other side, so as to provide a view line through the sash opening to a chart on the wall of the waiting room. All walls, woodwork, and furniture to be in white enamel.

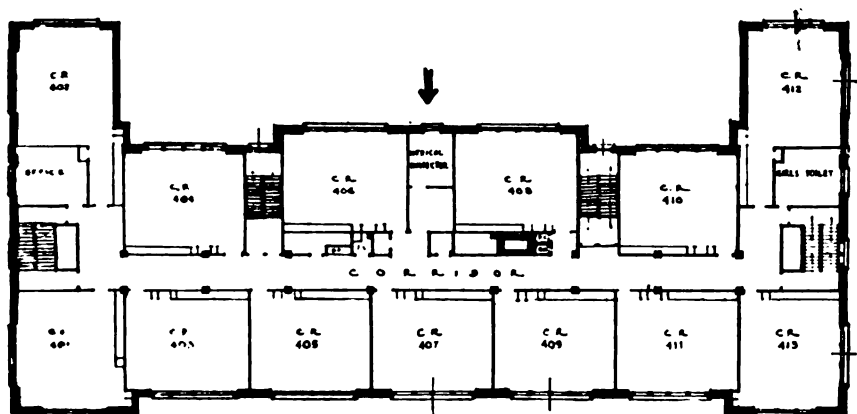


FIGURE 3.

As fully as conditions will permit, this plan is followed in the construction of medical rooms in old buildings which originally had none, as well as in the planning of new buildings. The problem of dimensions is naturally more easily solved in new buildings than in old ones.

Particular attention is called to the arrangement for the vision test chart. Three important requirements are here fulfilled:

First, a proper distance is allowed between pupil and eye test chart. This should be 20 feet, although, if necessary, 15-foot tests can be made satisfactorily.

Second, the test chart is placed at the far end of the room in a line directly opposite the source of light so that the pupil shall read it while standing with his back toward the window.

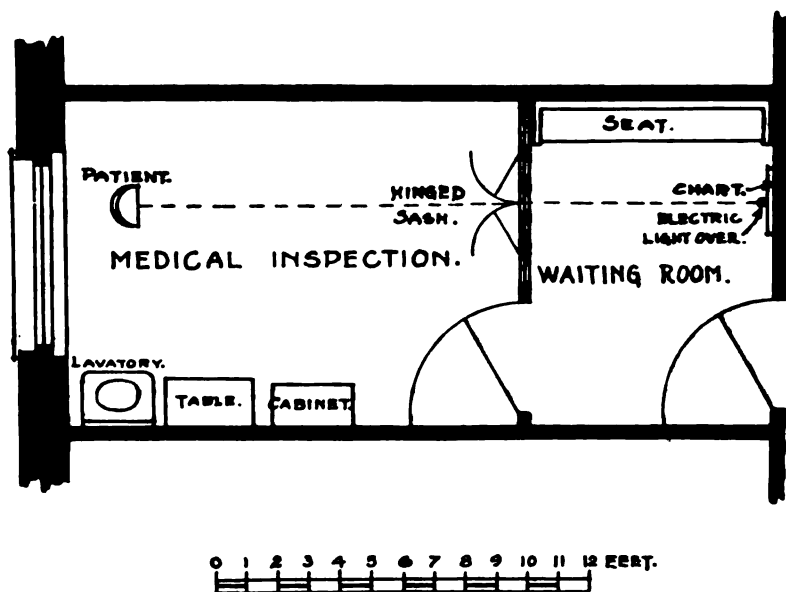


FIGURE 4.—Simple but effective plan.

Floor plan and arrangement of medical inspector's room generally followed in New York City. Detail of figure 3.

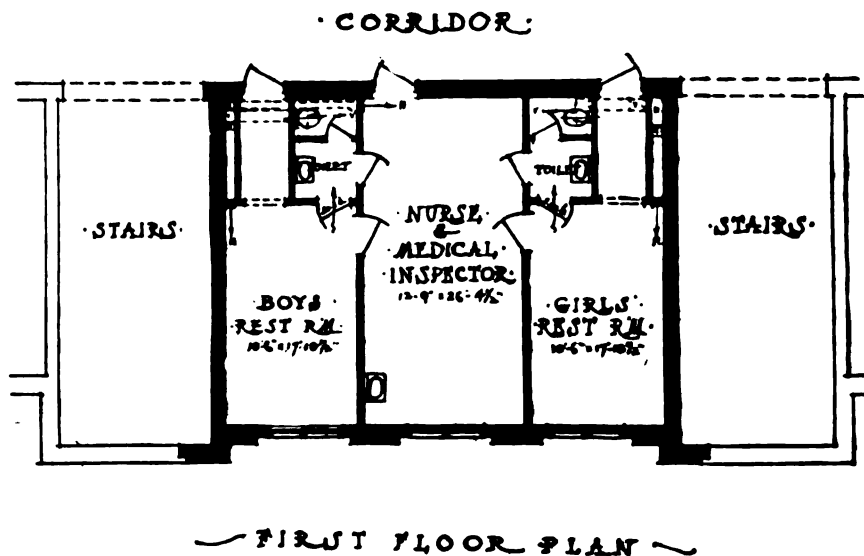


FIGURE 5.—The St. Louis plan.

A practical arrangement of nurse's and medical inspector's room with rest rooms and accessories. The aggregate floor area of these rooms does not exceed that of one classroom.

Third, an electric light above the chart is called for. It is imperative that this lamp should be carefully adjusted and shaded so that the light will fall upon the chart and should under no circumstances be exposed in the direction of the pupil.

AN IMPRESSIVE SUITE.

William B. Ittner, school architect of St. Louis, Mo., characterizes his plan, figure 5, as "a typical arrangement for medical rooms and rest rooms as I like to have them for my schools". Very little study of this plan will be needed to inspire in intelligent school authorities a desire to have such medical rooms in their schools. Mr. Ittner thus describes his plan:

This group of rooms is placed central in the plan, and preferably upon the intermediate story, so that it is readily accessible from all parts of the building.

It consists of a doctor's room for inspection, opening en suite through lobbies into boys' and girls' rest rooms, each with a toilet. All of the rooms are well lighted and the examination room is sufficiently large for eye testing, and the group appears to me to answer all the requirements. The central room is, of course, the nurses', ordinarily, and the doctor's room during his examination visit at the school.

The toilets shown here are inside the room, but are well ventilated through grilles in the entrance doors, the air passing from the rest room through the toilet and out the vent.

EXAMINATION ROOM AND CLINIC COMBINED.

The next diagram (fig. 6) shows part of a floor plan in a new building in Cleveland, Ohio, of a combined examination and clinic room. According to W. R. McCornack, the architect of the board of education, "Each school building in the city of Cleveland is now supplied with such a room." It is very gratifying that the educational authorities of Cleveland give their full support to their architect in carrying out his ideas. Mr. McCornack, after explaining his plan, which carries out the requirements already mentioned, adds that the room is furnished "with standard cabinet for supplies; sanitary sink, operated by knee action; desk, chairs, couch, and examining table, and in some instances a dental chair."

The inclusion of a dental chair, thus combining with the medical room a dental clinic, suggests the practice followed in some English cities. In figure 7 will be seen a floor plan of a public school in Sheffield, England. According to the chief medical officer of that city the educational authority had approved in 1915 the erection of three new school buildings containing such a suite of rooms for health work.

SCHOOL CLINICS.

It should be understood, however, that a room which is adequate for medical inspection is not necessarily suitable for a clinic or dispensary. The construction and equipment of school dispensaries present a different problem, which is merely touched upon in this

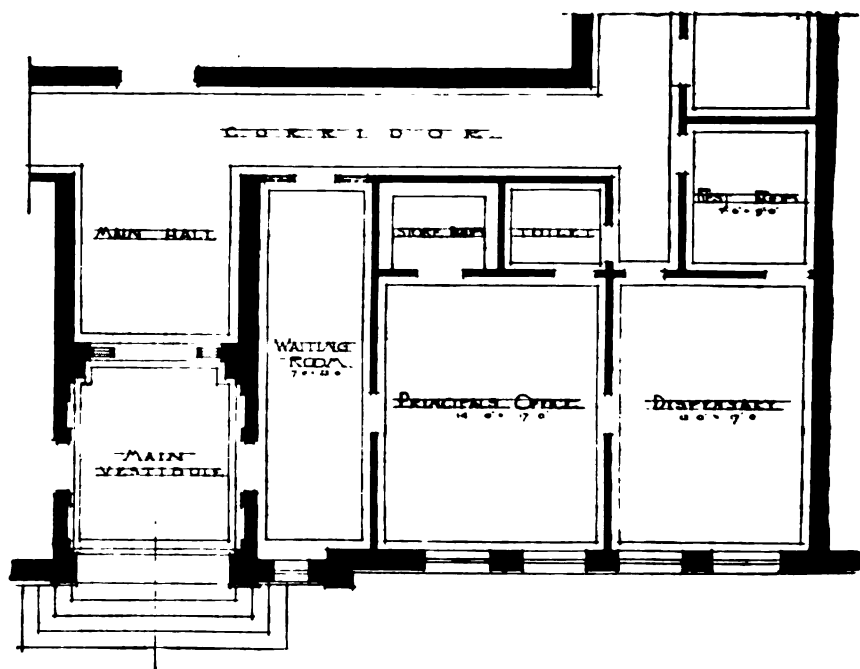


FIGURE 6.—Examination room and clinic in one.

Detail of floor plan in Cleveland school showing "Dispensary" or medical room next to principal's office and rest room.

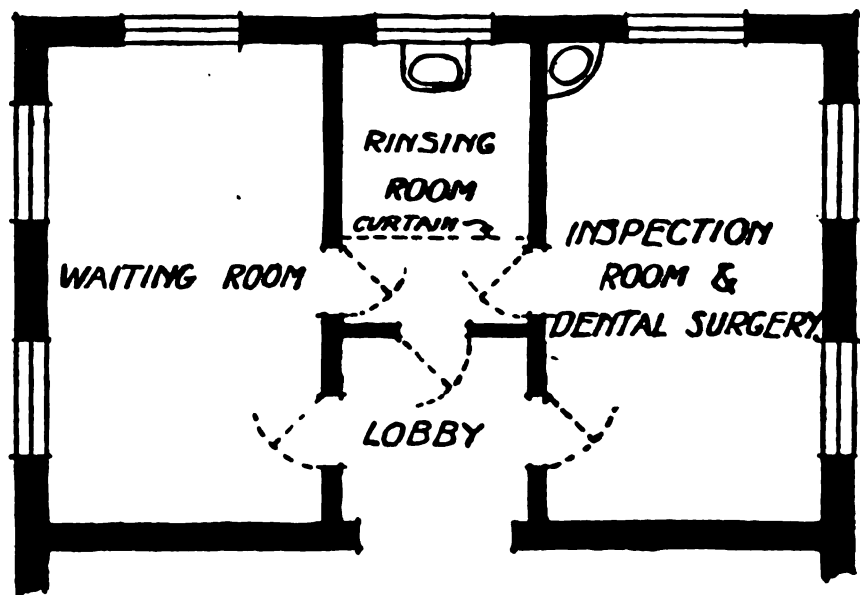


FIGURE 7.

discussion for the sole purpose of pointing out this difference. The adoption of either the Sheffield or the Cleveland plan of combining a dental clinic with the medical inspection room is not to be recommended except in those localities where the work is so light as to permit the use of the room for the two objects on alternate days. As a general rule, it will be found that it is more practical and perhaps more economical in the end to devote a room to the one specific service for which it is best adapted. For this reason, the practice prevailing in some English cities of renting private premises for either

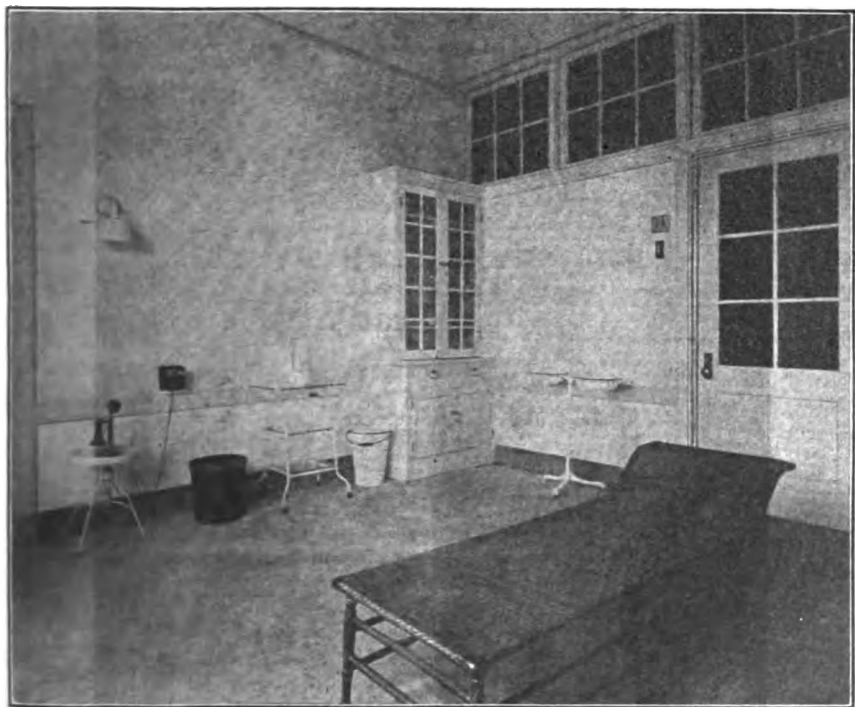


FIGURE 2.—School dispensary in Cleveland, Ohio.

An interior that satisfies the demands of hygienic standards—walls and woodwork finished in white enamel; good lighting; approved sanitary equipment, etc. This, like other school dispensaries in the same city, is equipped with weighing scales—a prime necessity for observing and combating malnutrition.

medical inspection or clinical work, where suitable accommodation can not be found in the school buildings, commends itself as a wise arrangement.

The advisability of making separate provision for inspection and clinical work has also been recognized by the New York City Board of Education. Plans for three large school buildings have been approved, calling for a dental clinic in each, in addition to the standard medical inspection room. But the New York City school authorities have lately taken a still more significant step, which must greatly advance the school clinic idea in the United States.

The city superintendent of schools has approved a plan general medical clinic (fig. 12). Such a clinic is to be placed experimentally, in a large school, centrally located, in a region

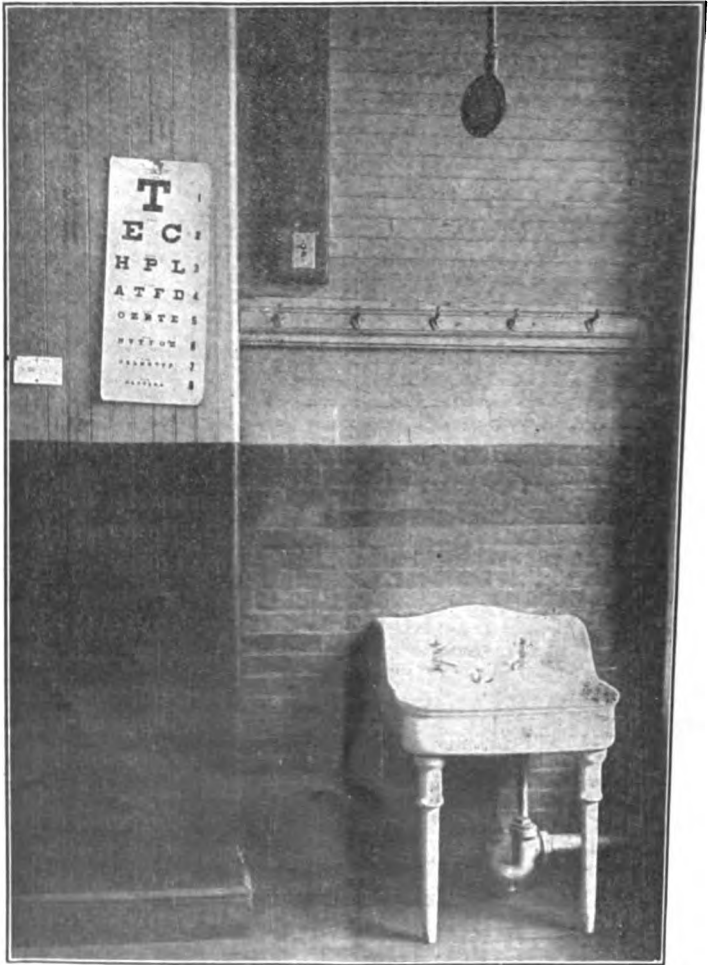


FIGURE 9.—An object lesson.

A corner of an old school building transformed into a medical room. Wall paint too dark. A sanitary washstand with plumbing for hot and cold water; commendable, provided hot and cold water, soap, and individual towels are supplied. Overhead adjustable lamp with reflector for lighting up eye test chart. Chart in poor condition and badly hung. It should be on the wall, nearer the window, which is on the right, and directly beneath the hanging lamp, by which it should be lighted on dark days. In its present position, the chart can not be artificially lighted without vitiating the test through the casting of rays of light into the patient's eyes. Framing, without glass, will preserve chart. Such details are worth studying.

the need of these medical services is apparent. By ingenious arrangement and apportionment of space, Mr. Snyder has put within the area of a single classroom unit a medical inspection room, three clinics, i. e., dental, eye, and nose and throat, all communicating by

a passageway with a waiting room, and two separate toilets and lavatories for doctor and nurse.

Of course it is not intended to do any surgical work in the nose and throat clinic, for operations on adenoids and diseased tonsils, according to the best approved standards, require bed care and other hospital facilities. For diagnostic work and medical treatment, how-

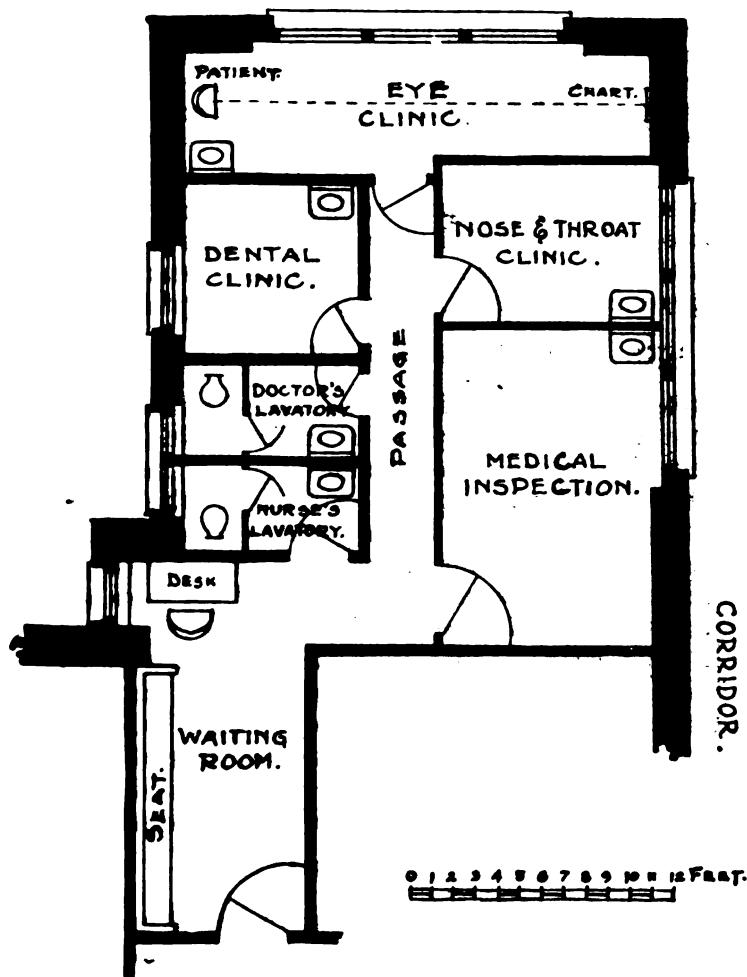


FIGURE 10.—General medical clinic.

Plan recently adopted for neighborhood clinic in large centrally located school in New York City.

ever, the nose and throat clinic in a school is as justifiable as the eye or dental clinic.

EQUIPMENT.

Next in importance to having adequate quarters for health work is proper equipment. A knowledge of what has been done in other cities, consultation with the health officers, and consideration of the

work to be done should determine what equipment is to be installed. Weighing scales, however, is one indispensable piece of equipment. Malnutrition has come to be recognized as a serious physical defect; and rate of growth is accepted as a practical index of nutritional condition. Frank A. Manny, whose studies of malnutrition among school children have given a new impetus to American endeavor in this field, sums up the matter as follows:

The absence of scales in nearly all of the schools makes it very difficult for over-worked nurses to find any satisfactory means of determining progress or retrogression. One of the greatest health services that could be rendered would be the equipping of all school clinics with scales and creating machinery to encourage their regular use. The scales should be as much a matter of course in equipment as the thermometer.

The necessary supplies, e. g., medical and clerical, should be decided upon in the same manner as the equipment. It will always be advisable to obtain supply lists from some of the large cities where the essential items have been determined after years of experience. The list given in Appendix II should prove helpful.

UPKEEP AND SANITATION.

The proper upkeep and sanitation of medical quarters are of vital importance. The least negligence or laxity in this direction is a serious reflection upon school administration. Under this head we must understand not only the cleansing of the room and its equipment, to wit, sweeping, dusting, and scrubbing, but also the bestowal of the proper care on every article in the room. It must also include the maintenance of every part of the room and accessories in such a manner that wear and tear will be reduced to a minimum and that repair and replacements shall be made promptly as needed. Periodical inspection by a responsible member of the administrative staff is needed. The requirements which naturally fall under these headings can not be formulated with minute precision; but the items included in the appended table of essential requirements are a fair indication of what experience has taught.

SURVEY AND STANDARDS.

Although the medical room in a modern school constitutes but one small unit in a large plant, the importance of its being adequate in construction, equipment, and maintenance became quite apparent in the course of the several studies made for the Bureau of Welfare of School Children, and already referred to. The table of standard requirements which follows has been based partly upon recommendations of well-known authorities and partly upon observations made in a number of schools. These observations led to the formulation of a survey schedule or inspection form (Appendix I), which covers practically all vital details of construction, illumination,

equipment, sanitation, and upkeep. If space permitted the descriptions of some of the rooms surveyed, the reasons for formulating this schedule with seemingly too much detail would at once be apparent.

In presenting this schedule or inspection form, together with the statement of essential requirements for medical rooms, to the consideration of school administrators and school health officers, it is no exaggeration to say that any school in which satisfactory answers to these questions can be secured is a distinct credit to the architect who planned it, to the school board that authorized it, and to all persons responsible for its equipment and maintenance.

TABLE OF ESSENTIAL REQUIREMENTS FOR SCHOOL MEDICAL ROOM.¹

1. LOCATION.

(a) *Accessibility*.—The room should be easy of access to pupils and to visitors. As a rule the latter are parents of children called to consult with the doctor, nurse, or principal. It should not be higher up than on the second floor. It is advisable to have it near the administrative offices unless these are too far up.

(b) *Practicability*.—The room should be so located as to receive a maximum of natural light. Proximity to playground or gymnasium is undesirable, owing to the noise, which interferes with hearing tests and the work generally.

2. SPECIAL ROOM.

All features of construction and equipment should indicate that the room was especially planned as an examination room. Use of this room as either an eye clinic or dental clinic is undesirable, but not entirely objectionable. (See p. 11.) The use of a teachers' room, a small office room, or other small accessory room for this purpose should not be tolerated except as a temporary arrangement.

3. WAITING ROOM.

A vestibule or small waiting room is necessary. Such place must be provided for children and parents waiting their turn to see either the doctor or the nurse. It is a serious error to have strangers present in the medical room during physical examination or consultation.

4. DIMENSIONS.

The room should be sufficiently long to allow a 20-foot line for vision tests. Where utterly impossible to attain this length, a 15-foot line may be used. The necessary distance might also be obtained by a diagonal line, provided the requirements for placing the test charts are not violated. (No. 7.)

5. NATURAL LIGHT.

¹ Paragraph numbers refer to figures in Survey Blank, Appendix I.

(a) *Windows*.—The window exposure and other factors should be considered as they would be with reference to a classroom. There should be ample light, but glare must be carefully avoided. The window area should equal approximately one-fourth of the floor area. A greater proportion might involve an excess of light. If such a condition exists, the light must be properly regulated by means of window shades. No curtains, no flower pots, or other ornaments on window sills.

(b) *Rating by percentage*.—This is merely a convenient, if arbitrary, method, applied in much the same manner as the marking of pupils' work and recitations. Excellent, 25 per cent or more; Good, 20 to 24 per cent; Fair, 15 to 19 per cent; Bad, less than 15 per cent. Figure to within 0.01 per cent of next higher rating.

(c) *Grading by judgment*.—Sufficient light, if ordinary newspaper type or 20-foot test line is easily read at far end of room by a person with normal or corrected vision.

(d) *Shades*.—Amber color is considered best. Material should not be torn or cracked, and the roller springs and cords should be in good workable condition.

(e) *Interior colors*.—Wall coloring with reference to light for a medical room may be ranked in the following order: 1, White; 2, light buff; 3, dark buff or tan; 4, green. This order is equivalent to Excellent, Good, Fair, Poor.

6. ARTIFICIAL LIGHT.

Artificial light should be overhead and indirect or semiindirect.

(a) *Electric*.—The size and number of bulbs should be determined by an illuminating expert and should attain a minimum of 3 foot-candles. Type B are vacuum filament lamps and type C are nitrogen gas filled lamps. The latter are powerful and intense and should be very judiciously shaded. Bulbs should be "frosted" if the direct system of lighting is used. Burnt out or "dead" lamps should be immediately replaced. Failure to do so is a discredit. Any method of shading that will minimize glare is satisfactory. Reflectors, whether of polished metal, prism glass, or any other glazed material, are more often harmful than useful. If glass globes are used they should be "depolished" or dull, not ground glass.

(b) *Gas*.—Open jets are objectionable, as much for the fire hazard as for the poor light obtained. A wire frame or basket around the gas jet is serviceable as a protection against fire and should be used even on gas lamps with mantles and globes, if within reach of children. When gas is the only illuminant available, it should be so utilized as to attain the same standard as with electricity.

7. VISION TESTS.

Only where the medical room is too small for the purpose should these tests be made outside of the room. The Snellen or other charts

should be well lighted. Side illumination is best. Direct illumination is good, if intelligently regulated. Patients must never face the source of light. If a lamp is used to light the chart, it should be properly shaded, every care being taken to keep rays of light deflected from patient.

(NOTE.—Snellen and other test charts are prime necessities. The subject is here considered merely with reference to light. Otherwise professional paraphernalia are beyond the scope of this survey.)

8. HEARING TESTS.

Hearing tests are ordinarily made either by watch or whisper. Any kind of noise is a disturbing factor. (See note 1 (b).)

9. EQUIPMENT.

A minimum of three chairs, not including those for waiting persons. One or two benches may suffice for the latter, although chairs are always to be preferred.

Weighing scales with measuring rods are of utmost importance with the growing attention given to the nutrition problem.

Supply cabinets and record files should be such as to afford ample storing and handling facilities for records and materials. Other equipment, only as actually needed by doctor and nurse. (See also list in Appendix.)

10. SANITARY CONDITION.

Windows, floors, furniture are either obviously clean or they are not clean. There are no intermediate degrees to an intelligent and experienced observer. Such articles as are not actually in use in the work of the school nurse and doctor are to be considered as unnecessary.

11. OBSERVATIONS.

Odds and ends which reflect conditions in the room and the use made of it should be noted, whether creditable or otherwise.

APPENDIX I.

BLANK FORM FOR SURVEY AND INSPECTION OF MEDICAL ROOMS.

MEDICAL ROOM.

	Date of survey.....
	Weather.....
School.....	Address.....
	Date of erection.....
1. Location of room: Floor.....	Adjoining rooms.....
2. Special rooms: Yes. No. (If no, for what other purpose used?).....	
3. Special waiting room or vestibule: Yes. No.	
4. Size of room:	
Length.....	Width.....
Main room.....	Floor area.....
Anteroom.....	
Total, both rooms.....	
5. Natural light: Exposure—E. W. N. S.	
Windows:	
Total area.....	Proportion to floor area.....
Rate:	
Excellent.....	Good..... Fair..... Bad.....
Grade according to judgment: Sufficient..... Insufficient.....	
(Test by reading 20-foot line of Snellen chart.)	
Shades:	
Color.....	Condition.....
Wall coloring:	
Green.....	Buff..... Dark..... Light..... White.....
6. Artificial light:	
Electric:	
Overhead.....	On walls.....
Number of bulbs.....	Type "B"..... "C".....
Plain.....	Frosted..... Half frosted..... In order..... Dead.....
Reflector.....	Color..... Globe—Plate..... Polished..... Dull.....
Gas:	
Open jet.....	Open jet with wire frame.....
Grade according to judgment: Sufficient..... Insufficient.....	
7. Vision tests: Made in room..... Outside.....	
Snellen chart:	
Where placed with relation to light.....	
Side illumination.....	Direct illumination.....
Is it exposed all the time?	
Condition: Good..... Clean..... Soiled..... Torn..... Bent.....	
Is there artificial light above chart controllable by doctor? Yes. No.	
Other test charts used?	
8. Hearing tests made: Yes. No.	
By watch.....	By whisper.....
Noise from outside of building.....	From within.....
9. Equipment:	
Chairs (give number).....	Supply cabinet.....
Record file.....	Table..... Weighing scales.....
10. Washing facilities:	
Running water.....	Hot..... Cold.....
Soap.....	Individual towels.....
Faucets in working order.....	Drain.....
11. Sanitary condition:	
Clean.....	Not clean.....
Floor.....	Date last cleaning.....
Walls.....	
Windows.....	
Furniture.....	
Presence of unnecessary articles, etc.	
12. Observations: State any striking or unusual features. Use other side.	

APPENDIX II.

TYPICAL EQUIPMENT AND SUPPLIES IN MEDICAL ROOMS, NEW YORK CITY SCHOOLS.

LISTS AND SUGGESTIONS BY DR. S. JOSEPHINE BAKER, DIRECTOR, BUREAU CHILD HYGIENE, DEPARTMENT OF HEALTH, NEW YORK CITY.

EQUIPMENT.

Desk, wardrobe, medicine cabinet, couch, two chairs.

In the newer schools, where distinct provision has been made for the medical inspector, the room is equipped with a basin and running water.

It will be well to add scales with measuring rod, electrically lighted vision chart, portable screen, and filing cabinets suited to the particular kind of records kept.

MEDICINES, ETC.

Cotton, gauze, bandages (1 and 2 inch), boracic acid, green soap, collodion, tincture of iodine, sulphur ointment, white precipitate ointment, vaseline, peroxide, lysol, aromatic spirits of ammonia, hand scrub, tongue depressors, toothpicks.

In those schools where it may be desirable to treat simple eye conditions in pupils who fail to visit the dispensary regularly or who can not afford the services of a private physician, provision should be made by adding to the equipment articles such as argyrol, cocaine, bichloride of mercury, atropine, alloy, bluestone, yellow oxide of mercury, nitrate of silver.



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DEPARTMENT OF THE INTERIOR

BUREAU OF EDUCATION

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BULLETIN, 1919, No. 3

HOME EDUCATION

By

ELLEN C. LOMBARD

SECRETARY, HOME EDUCATION DIVISION

Advance Sheets from the Biennial Survey of Education
in the United States, 1916-1918



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HOME EDUCATION.

By ELLEN C. LOMBARD.

Secretary, Home Education Division.

The conservation of childhood and youth is a problem that is occupying the attention of educators, publicists and welfare workers in this and other countries. Conservation of child life is not separable from the problem of conservation of womanhood. During the past two years greater service was demanded from the women throughout the country. Some were called upon to take the places of men who had joined the army; some were left to assume the double duties of father and mother. Help must be given to broaden the outlook of the women, many of whom live in homes so isolated that opportunities for development are lacking. The viewpoint of the men who have been across the sea has been liberalized by contact with foreign lands and peoples. It will help in the readjustment of the returning forces if each agency of general welfare will consider the needs of the home in working out programs.

ENGLAND.

Schools for mothers.—In England and Wales schools for mothers have been authorized under the Government board of education. Under the new regulation, existing or contemplated schools for mothers will receive Government grant-aid each year for promoting the care, training and physical care of infants and young children.

Schools for mothers are described as educational institutions providing training and instruction for mothers in the care and management of infant and young children. Instruction is to be under three heads: Systematic classes, home visiting, and infant consultation. Provision of specific medical or surgical care is to be only incidental. Payments of grants will be made upon the basis of the work done by the institution during the previous year. This work will be co-ordinated with existing institutions, such as maternity centers, baby clinics, and infant dispensaries.

A writer in "The Home Nursery School" points out that the parents' responsibilities do not end in bringing children into the world, feeding and clothing them, and sending them to school. The chil-

dren have a right to a definite place in the home. This is universally acknowledged among the middle and upper classes. The children have their nursery, their own room, where they keep their own things, and, within certain well-defined limits, do as they like. You do not find these children in the streets after school hours, and this not only because they are not allowed there, but because they find in their homes sufficient interests to keep them there. Then he speaks of the impossibility of setting aside a room in the workingman's home solely for the use of his children, and remarks that the inability to provide such an apartment is not a sufficient reason for giving the children no place at all. He further says:

In these days of self-sacrifice when those among us who are wise look into the future with longing and hope and plan for a better world, we must strain every nerve to provide the best we can for the children, realizing that it is they who will come into the good heritage purchased by the blood of their fathers. They are the pivot on which all will turn, and we must do our part now to give them the best education possible, built up on the strongest, deepest religious basis. So we see clearly that they must have their rights, their share in the home, a definite place that belongs to them.

UNITED STATES.

In the United States, governmental, State, and local child-welfare agencies are devoting their energies to building up a strong and intelligent generation.

An appeal to conserve childhood and youth has been made to business men, to parents, to teachers, and to churchmen by Margaret Slattery in *The Second Line of Defense*. She says:

The American home needs once more to be the center of inspiration for deeds that must be done for the new liberty and the true democracy, struggling more desperately than ever it has struggled since the world began to free itself from the bonds that bind. The intelligent American home created by two people who have had every material advantage is falling in its duty if, in these days when the world fights for the very existence of the principle of the right of the weak, they do not instill into the hearts of their children the fundamental principle upon which brotherhood is built.

If parents permit their children to grow up in an atmosphere of autocracy and special privilege, it will mean not only shrinking their souls, warping their minds, cheating them of their rights as American children, but it will mean threatening the future of the Nation with more dire calamity than it faces to-day overseas.

America calls upon parents * * * to look to their own sons and daughters; to teach them the meaning of love for God and love for man; to train them in ethics; to train them in a sincere hatred of shams, a deep love of truth, a passion for justice; to show them the folly of extravagance. * * * It is their right to be taught from the very beginning that no one on earth can legitimately get "something for nothing," that every human being owes something to his brother, and that work is the greatest gift of God.

WORK OF FEDERAL GOVERNMENT IN HOME EDUCATION.

Department of the Interior.—The Federal Government through the home education division of the Bureau of Education has reached over a half million homes with some kind of educational material.

Through the cooperation of over 75,000 women, especially selected because of their qualifications in rural districts in 2,100 counties, it became possible to reach more than 70,000 mothers of little children under 3 years of age, with information regarding the care and training of the children.

Several publications were used to carry on the work for child welfare, among them being:

Care of the Baby; Save the Baby; Duty of Parents in Regard to Sex; Care of the Baby in Hot Weather; Reprint of the Chapter on Home Education, Commissioner's Annual Report, 1916; Reading Course for Parents; Neighborhood Play; Circular Letter No. 1, 1916-1917, Problems of the Boy and Girl in the Home; Circular Letter No. 3, 1916-1917, Problems of the Foreign Mother in the Home; How to Select Food; One Thousand Good Books for Children.

Field work for the extension of home education.—Three tours in the interest of home education and child welfare were made. Special collaborators held meetings in the following towns and cities: Leesburg, Fredericksburg, Danville, Bristol, and Abingdon, Va.; Asheville, Lincolnton, Wadesboro, and Greensboro, N. C.; Rock Hill, Florence, Columbia, Lancaster, and Charleston, S. C.; Augusta, Atlanta, Macon, Milledgeville, Dallas, Marietta, and Fairy, Ga.; Tallahassee, Tampa, Miami, Eustis, Tavares, Avon Park, Clearwater, Clermont, St. Petersburg, Haines City, Monte Verde, Fort Pierce, and West Palm Beach, Fla.; Montgomery and Birmingham, Ala.; Columbus, Miss.; and Chattanooga and Nashville, Tenn. The result of this work was evident in the organization of parent-teacher associations.

Some of the typical requests for help have been for material on subjects as follows: Something to help bring up the children right; material to better the home; literature on moral training; on home making and child nurture; home study for boys and girls; bulletins on home matters; literature for a population of Swedes and Cornish, German, Dutch, and Irish; care of the sick; books suitable to children who have completed the common-school course; help for bringing the home and the school together; reading matter on plays and games; literature on the care and training of children; outlines for programs for child study; literature for the formation of parent-teacher associations where there is no church, no society of any kind.

Home reading circle.—In order to answer some of the demands it was necessary to institute the home reading circle with selected

courses on various subjects. Committees of specialists selected the books in these courses with the cooperation of the Bureau of Education.

Three new courses were issued during 1916-1918 in addition to seven courses previously distributed. They are listed as follows:

Course No. 7, Thirty World Heroes: 1. Moses: Exodus and Deuteronomy; 2. Socrates: Dialogues and Discourses of Plato, Socrates; 3. Alexander: Alexander the Great; 4. Julius Caesar: Seven Roman Statesmen, Life of Julius Caesar; 5. Jesus Christ: The Syrian Christ, Harmony of the Gospels; 6. St. Paul; St. Paul the Traveler and Roman Citizen; 7. Marcus Aurelius: Golden Book of Marcus Aurelius, Marcus Aurelius and the Later Stoics; 8. St. Augustine: Confessions; 9. Mohammed: Heroes and Hero Worship, Mohammed and His Power; 10. Alfred the Great: Story of King Alfred, Life and Times of Alfred the Great; 11. Joan of Arc: Jeanne D'Arc, Joan of Arc; 12. Dante: Makers of Florence, Vision of Dante Alighieri; 13. Michael Angelo: Makers of Florence, Michael Angelo; 14. St. Francis of Assisi: Everybody's St. Francis, Life of Francis of Assisi; 15. William of Orange: William the Silent, Rise of the Dutch Republic; 16. Galileo: Great Astronomers; 17. Shakespeare: Shakespeare, His Mind and Art, Life of Shakespeare; 18. Molière: Molière, His Life and Works; 19. Cromwell: Life of Cromwell; 20. Napoleon: History of Napoleon Bonaparte, Napoleon—Warrior and Ruler; 21. Pestalozzi: Pestalozzi, His Life and Work; 22. Goethe: Life of Goethe; 23. Rousseau: Rousseau and Naturalism in Life and Thought; 24. Darwin: Life and Letters; 25. Scott: More Than Conquerors, Life of Scott; 26. Livingstone: More Than Conquerors, Personal Life of David Livingstone; 27. Florence Nightingale: Life of Florence Nightingale; 28. Elizabeth Frye: Story of Elizabeth Frye; 29. Pasteur: More Than Conquerors, Life of Pasteur; 30. Tolstoi, the Man and His Message, Reminiscences.

Reading Course No. 9, Thirty American Heroes: 1. Columbus: Columbus the Discoverer; 2. Father Marquette: Heroes of the Middle West, Father Marquette; 3. William Penn: William Penn, The True William Penn; 4. Washington: Washington, A Virginia Cavalier, George Washington; 5. Franklin: Benjamin Franklin, Autobiography of Franklin, Life of Franklin; 6. Hamilton: Alexander Hamilton; 7. Jefferson: Life of Jefferson, Life and Writings of Thomas Jefferson; 8. Daniel Boone: Daniel Boone, Daniel Boone and the Wilderness Road; 9. George Rogers Clark: How George Rogers Clark Won the Northwest, The Winning of the West; 10. Lincoln: Men Who Made the Nation, A Short Life of Lincoln; 11. Lee: Life of Lee, Lee, the American; 12. Horace Mann: Horace Mann, Educator, Patriot and Reformer; 13. Hawthorne: Life of Hawthorne; 14. Parkman: Life of Parkman; 15. Sidney Lanier: Life of Sidney Lanier; 16. Mark Twain: Boy's Life of Mark Twain, Life of Mark Twain; 17. Morse: Masters of Space, Letters and Journals; 18. Fulton: Robert Fulton; 19. McCormick: Cyrus Hall McCormick; 20. Edison: Thomas A. Edison, Life of Edison; 21. Booker T. Washington: Up From Slavery; 22. Trudeau: Autobiography of Edward L. Trudeau; 23. Jacob Riis: The Making of an American; 24. John Muir: Story of My Boyhood and Youth; 25. John Burroughs: Our Friend, John Burroughs; 26. Mary Lyon: Life of Mary Lyon; 27. Frances E. Willard: Life of Frances Willard; 28. Clara Barton: Life of Clara Barton; 29. Alice Freeman Palmer: Life of Alice Freeman Palmer; 30. Anna Shaw: Story of a Pioneer.

Reading Course No. 10, American History: 1. European Background of American History; 2. The Colonies; 3. Montcalm and Wolfe; 4. Old Virginia and Her Neighbors; 5. Beginnings of New England; 6. Men, Women, and Manners in Colonial Times; 7. Dutch and Quaker Colonies in America; 8. The

American Revolution; 9. Lecky's American Revolution; 10. Story of the Revolution; 11. Critical Period of American History; 12. Henry Clay; 13. Life of George Washington; 14. Rise of the New West; 15. Winning of the West; 16. Economic History of the United States; 17. Division and Reunion; 18. The Lower South in American History; 19. Abraham Lincoln; 20. Reconstruction, Political and Economic; 21. National Problems (1884-1897); 22. America as a World Power; 23. America in Ferment.

There are about 8,000 readers now enrolled in the reading circle. Among these are men and women, boys and girls, in almost every profession and occupation. In New York State 720 are enrolled; Pennsylvania, 522; California, 477; Ohio, 440; Massachusetts, 413; New Jersey, 346; Oregon, 286. Enrollments have been made in Alaska, Canada, Canal Zone, China, France, Hawaii, Porto Rico, and Philippine Islands.

State libraries cooperate.—State libraries will furnish the books for readers in the reading circle of the Bureau of Education and cooperate in every way as far as their funds permit, as follows: California, Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Texas, Utah, Vermont, Virginia, Washington, Wisconsin, and Wyoming.

Many local libraries have taken active part in enlisting readers and in securing the books.

Reading circles formed.—Reading circles have been formed by individuals, teachers, and librarians. In California the largest circle has been in existence nearly three years. It has an enrollment of 108 mothers and teachers, and an active membership of 70. The success of this circle is due to the leadership.

THE COMMUNITY PROBLEM.

Cooperation between home and school was further developed throughout the States during the years 1916-17, 1917-18, and is becoming a recognized necessity in communities of thinking parents. Education in the home must be supplemented by education in the school, and vice versa. When this is sufficiently understood there will be fewer misunderstandings between parents and teachers and greater intelligence in the training of the children at home and at school.

Parent-teacher associations.—An increased number of parent-teacher associations has been reported and there is a noticeable attempt to serve the community in a better and more effective way in the work of these organizations.

Two States, Michigan and Kentucky, have effected State organizations of parent-teacher associations. Local organizations of parent-

teacher associations in towns and cities have increased in number according to reports received by the Bureau of Education, which, through the cooperation of the woman's department of the National Council of Defense, is preparing a list of such organizations. About 7,000 organizations are engaged in activities relating to the home and the school. To promote this work the Bureau of Education, through its home education division, has sent out publications as follows:

How to Organize Parent-Teacher Associations; How the Parent-Teacher Association Helps the Home, the School, and the Community; Suggestions for a Program; Keeping the Children in School; Suggestions for War-Time Activities of Parent-Teacher Associations; Suggestions for Leisure Hours of Children; The Des Moines Plan of Parent-Teacher Associations; Aims and Purposes of Education.

The National Congress of Mothers and Parent-teacher Associations has cooperated with the Bureau of Education since 1913 in carrying on the work of home education. This organization has given material aid as well as publications to further the work.

Through the kindergarten division of the Bureau of Education, 55 circular letters were issued on the training of little children. These letters, prepared by mothers who were trained as kindergartners, deal with the following subjects:

Story-telling for Patriotism; The Child is Not a Possession; Love and Patience Accomplish Most with Children; How the Children Keep a Weather Calendar; Give Children Toys which Answer Their Needs; The Intelligent Mother May Guide a Child's Play.

A notable publication of the year 1917 on the function and development of parent-teacher associations and the reasons why they should be organized in every school district was Angelo Patri's *A Schoolmaster of the Great City*.

The author's own experience as pupil, teacher, and school principal is the basis upon which he has founded his opinions and developed his work. He discovered that the problems of the school were community problems; that "the culture of children would have to be a cooperative effort between the people and the teachers." In a chapter on "The parents at work" all of the essentials are presented for developing the work of parents and teachers, gradually drawing together the home and school, and bringing the collective influences to bear upon the education of the children and their natural development.

During 1917 parents' meetings in a New York City school were the outcome of this realization. It has been generally conceded that play and recreation have a direct bearing upon the healthy life of the community. It is with this in view that the Bureau of Education has sent out letters with suggestions regarding the "Leisure

hours of children." No less important are the hours of little children when most of their activities are connected with play.

The Committee on Public Information of the city of Boston, through its women's committee, issued leaflets in which are suggested Home Playthings for Children—Leaflet No. 1, the first three years, and Leaflet No. 2, play and work for children from 3 to 6 years old. These leaflets, distributed at the Children's House in Boston, offer rich opportunity for the development of the children.

The following two lists of toys and objects are printed in leaflet form, Nos. 1 and 2:

Toys for the first three years.—Ball, colored worsted ball hung above crib (to look at or to play with); rattle, celluloid dumb-bell (to hold and to shake); prisms, hung in sunny window (for color); cloth bag filled with newspaper, hung in crib (to kick); other objects above crib (to reach); rubber doll or animal ("to chew and to admire"); floating bath toys (to divert); big soft ball (to creep after); small celluloid ball (to bounce); cloth picture books; rag doll (to hug and love); soft animals (Teddy bears, cats, etc.); simple wooden carts (to drag about); simple wooden animals (to drag about); kiddy-kar, or rocking-horse chair (for physical exercise and for fun).

Toys for children from 3 to 6 years of age.—For playing house—dolls (large and small), furniture (beds, tables, chairs, etc., well made), carriage, tea sets, stove, kitchen dishes (tin), carpet sweeper, tub washboard, etc.; for farming—barn and barnyard animals in plenty, Noah's arks, wagons (with horses to harness), wheelbarrows, wagons (large), reins; for transportation—trains of cars, model wood toys (trains, motors, etc.); for building—blocks (well-made cubes, bricks, etc.); games—picture-puzzle blocks, tops, tenpins, balls (large and small), bean bags, soap-bubble pipes (clay) hand-work materials (black-board-fastened to wall), large colored crayons, large pencils, blunt scissors, plasticine or clay, paints (tube paints, large Japanese brush), pictures and paste for scrapbook making, paper and cardboard to make toys, toy making from boxes and other materials in the home, materials from out of doors (seed stringing, burdock furniture making, acorn tops, tea sets, etc.).

Department of Labor.—Education in the home has been stimulated by the movements to conserve child life. Literature on the care of babies has been issued by Government and State authorities, so that every mother in every State may learn about the needs of her child. The "Children's year," instituted in 1917 by the Children's Bureau of the United States Department of Labor, has done much to bring communities to a realization of the value of child life and has helped in establishing clinics where babies have been weighed and measured. Parents and teachers have cooperated in this form of child-welfare work. The program included the saving of 100,000 babies during the year. With the cooperation of the woman's committee of the National Council of Defense local committees were formed in each State and each State was assigned its quota of children to be saved.

To assist in carrying on this work the Department of Labor issued leaflets and circular letters. These publications are a contribution

to home education which are valuable in the conservation of child life.

Some of the leaflets are:

Children's Year Working Program; Children's Health Centers; The Public Health Nurse; Saving Mothers; The Children's Year Campaign; Save 100,000 Babies; April and May Weighing and Measuring Test, Part 1; April and May Weighing and Measuring Test, Part 2; April and May Weighing and Measuring Test, Part 3.

Through the press service the Children's Bureau issued circular letters of value to mothers under the following headings:

American Mothers, Attention!; Doing War Work at Home; When to Begin the Care of a Baby; American Mothers, Will You Help "To Hold the Line"?; American Mothers, Uncle Sam is Depending on You!; Children and War Food Substitutes; American Mothers, Watch Your Children's Teeth!; The Nation's Eyes; The Family Purse and the Children's Food; War Savings and Children's Summer Clothing; The Fourth of July and Baby Saving; Keeping Baby Fit in Summer; The Mother and the Problem of Child Labor; Traveling with Children; Patriotism and Play; What One Family is Doing for Play Week; Play and War Savings; Teaching Children to Play the Game; When is a Child Healthy?; The Good Manners of To-day; and "Carrying on" the Baby Test.

Department of Agriculture.—The care of the family has received much attention by the United States Food Administration. The necessary restrictions incident to war conditions have created a demand for information regarding food. Food leaflets have been issued regarding Milk, Vegetables in Winter, Potatoes, Dried Peas and Beans, Save Sugar, Wheatless Breads and Cakes, Fresh Vegetables, Use More Fish, Rice, Hominy, Start the Day Right, A Whole Dinner in a Dish. Choose Your Food Wisely, Instead of Meat, Food for Your Children, etc. The Food Thrift Series has been helpful to the home-maker.

Department of Commerce.—The Bureau of Standards of the Department of Commerce has issued a bulletin on Materials for the Household dealing with structural materials, flexible materials, stationery cleansing agents, fuels, etc.

Treasury Department.—A publication of the Public Health Service which is much needed in the homes is the one on Prevention of Disease and Care of the Sick which has recently been published.

STATE BOARDS OF HEALTH AID HOME EDUCATION.

Some of the States through their boards of health have supplied the homes during the past two years with educational material regarding the care and feeding of children. The following States have issued Mothers' Handbooks which are now available under various titles: Indiana, Massachusetts, Mississippi, Montana, Nebraska, New York, North Carolina, South Dakota, Utah, Washington, Wisconsin.

It is evident that State boards of health are supplying in these bulletins ample information regarding the value and need of birth registration and of how infant mortality may be reduced. Scientific knowledge for the mother regarding her own care and the care of her baby is included in all of these bulletins. At least two States make use of Dr. L. Emmett Holt's *Save the Babies*, published by the American Medical Association.

The baby's food is given much attention and there is always included a section on the preparation of artificial food and the dangers to be avoided. There is a certain uniformity in the form of these handbooks indicating perhaps a concerted action on the part of State boards of health to provide the home with scientific information in the effort to conserve human life.

Kansas has included some suggestions on the physical, mental, moral, and social development of the child at different periods, also suggestions on education through play.

Many of the State boards of health, not having handbooks devoted to child welfare, have included in their monthly publications articles on the care and feeding of babies. Several bulletins of the West Virginia State Department of Health have been almost exclusively devoted to the care of babies. Pennsylvania has issued several bulletins devoted to infant life.

Another publication on child care that finds its way into the homes is in the form of leaflets and letters. At least two States send out letters to expectant mothers. Massachusetts, New York, and Pennsylvania send literature in foreign languages.

The following list of publications for home use has been made from material available in various States during 1916-1918. It is probable that there is still other material issued by the States which is not listed:

BABY BULLETINS.

California.—*Saving the Babies; Children's Year Bulletin; Childhood and Health.*

Connecticut.—*Uses Government bulletins.*

Idaho.—*If You Have a Baby; The Child.*

Illinois.—*Our Babies; Better Babies; Register the Baby's Birth; Prevention of Blindness in Babies.*

Iowa.—*His Lordship the Baby; Save the Babies; Measles, Bulletin No. 4.*

Kansas.—*Conservation of Child Life; Letters to Expectant Mothers; Kansas Mothers' Book.*

Maine.—*Feeding and Care of the Baby; Hints on Nursing the Baby, Circular 27; Diet of Children; Health of Home and School, Leaflets Nos. 24, 26, 21.*

Massachusetts.—*Food for Children Two to Six Years Old; Baby and You; Letter to an Expectant Mother; For Mothers with Babies (in seven foreign languages).*

Montana.—*Care of Children in War Time.*

Nebraska.—Your Baby, How to Keep It Well, 1917.

New Jersey.—The Public Health Nurse; Is Your Baby Registered; Saving Mothers.

New York.—Save the Children.

North Carolina.—How to Keep Your Baby Well; Save the Babies; Baby Welfare.

Oregon.—To Expectant Mothers; Are Your Baby's Eyes Sore?

Utah.—Save the Babies.

Washington.—Is Your Baby Healthy?

LEAFLETS AND CIRCULARS ON CHILD CARE.

Idaho.—If You Have a Baby.

Maine.—Diet for the Child (12 to 18 months); Diet for the Child (18 months to 3 years); Diet for the Child (3 to 6 years); Leaflet No. 21, Health of Home and School, Emergencies in Childhood; Leaflet No. 24, Health of Home and School; Leaflet No. 26, Guideboards to Infant Welfare; Circular No. 271, Hints on Nursing the Baby.

Massachusetts.—List of Illustrated Lectures and Moving Pictures on Health Topics. Films on child welfare are available on Bringing It Home, The Long Versus the Short Hand, etc.; For Mothers with Little Babies (translations in French, German, Greek, Italian, Polish, Portuguese, and Yiddish); A Health Creed for Massachusetts Boys and Girls; Food for Children from Two to Six Years Old.

New Jersey.—The Public Health Nurse; Saving Babies a Community Problem; Is Your Baby Registered?; Saving Mothers.

New York.—Special Bulletin No. 1, Infant Welfare Campaigns; Special Bulletin No. 2, Before the Baby Comes; Circular No. 3, The New-Born Baby; Circular No. 4, Artificial or Bottle Feeding; Circular No. 5, The Summer Care of Babies; Circular No. 6, Care of Milk in the Home; Circular No. 7, From the Bottle to Table Food; Circular No. 8, Avoid Infection; Circular No. 14, 1917, The Conduct of an Isolation Period for Communicable Diseases in the Home; Circular No. 19, 1917, Amusements for Convalescent Children; Circular No. 1917, Sore Eyes of New-born Babies.

BULLETINS ON CHILD WELFARE.

North Carolina.—Special Bulletin No. 50, How to Keep Your Baby Well; Special Bulletin No. 75, Baby Welfare.

North Dakota.—Child Conservation.

Oregon.—To Expectant Mothers; Are Your Baby's Eyes Sore?

Pennsylvania.—Form 20, Save the Babies (published in English, German, Italian, Polish, Slovak, Yiddish, Lithuanian, and Magyar); Form 45, First Form 47, Birth Registration (published in English, German, Italian, Polish, Slovak); Form 48, Home Milk Supply (published in English, German, Italian, Polish, and Slovak); Form 49, Blindness in Infants.

South Dakota.—Save the Babies.

Washington.—Is Your Baby Healthy?

Wisconsin.—Baby Bulletin.

The divisions of child hygiene in the Kansas and Massachusetts State Departments of Health issue letters to expectant mothers each month on prenatal care.

In New York and Kansas "Little Mothers' Leagues" have been organized under the direction of the State departments. Leaflets are issued to help in organizing young girls in helping their parents on the care and training of young children.

A recent bulletin on the Care of Children in Wartime, issued by the Montana State Board of Health, has some interesting and valuable data on the "Lessons taught by the war," "Infant mortality," "Lax school laws," and "Feeding of school children." Montana has also issued a useful outline for a Study Course on Public Health. It contains an outline for the study of many subjects relating to family life, among them being "The homemakers' responsibility," "The care of food," "Health and the house," etc.

In many States the bulletins of the State boards of health, issued regularly during the past two years, contain material especially prepared for the home. The following partial list will give an idea of what some States are doing:

Kansas.—Bulletin, Vol. XII, No. 12, 1917; *The Conservation of Child Life*, (1) "Reduction of the infant mortality rate; Blank for child conservation house-to-house survey," etc. (2) "Care and treatment of dependent and crippled children"; (3) "Public health protection of school children"; Bulletin, Vol. XIV, No. 7, July, 1918, *When and How to Tell the Story of Life*; Bulletin, Vol. XIII, No. 12, 1917; *The Conservation of Child Life*.

Kentucky.—Bulletin, Vol. V, May, 1915, *Household Economics*, (3) "Making a home," (5) "Needs of the home," (6) "Suggestions for study," (10) "A modern farm kitchen," (11) "Rights of the child," (12) "Care of the children in the home."

Maine.—Bulletin, Vol. IV, No. 2, March, 1916.

Michigan.—Public Health Bulletin, Vol. VI, No. 4, April, 1918, "General care of the baby," "Child-welfare campaign," "Problem of clothes for little ones," "Child welfare," etc.

New Hampshire.—Bulletin, Vol. IV, No. 6, April, 1916, "The summer care of infants," "Save the babies' eyes," etc.

New York.—Health News, new series, Vol. XIII, No. 5, May, 1918, *Save the Children*, etc.; Special Bulletin No. 1; *Infant Welfare Campaigns*; Circular No. 27, *Milk and Its Relation to Health*.

North Dakota.—Bulletin, Vol. II, No. 2, April, 1918, *child welfare number*.

Pennsylvania.—Bulletin, No. 16, *The Conservation of Infant Life in Pennsylvania*; Bulletin No. 31, *The Baby the Most Important Problem in Modern Life*; Bulletin No. 34, *How to Organize a Baby-Saving Show*; Bulletin No. 69, *Flies a Factor in Infant Mortality*.

West Virginia.—Bulletin, Vol. IV, No. 3, July, 1917, "Care of the baby," "Register your baby," etc.; Bulletin, Vol. V, No. 3, July, 1918, "The baby saving campaign," "Save the babies," "The care of the babies," etc.; Bulletin, Vol. V, No. 2, April, 1918, "A drive for baby saving," "Motherhood and preparation for it," "Baby welfare," etc.



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DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 4

A MANUAL OF EDUCATIONAL LEGISLATION

FOR THE GUIDANCE OF COMMITTEES ON
EDUCATION IN THE STATE LEGISLATURES

Prepared under the direction of the Rural Division
United States Bureau of Education



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A MANUAL OF EDUCATIONAL LEGISLATION.

I.—PURPOSE AND SCOPE.

The purpose of this manual is to place in the hands of the educational committees of the 44 State legislatures that convene in 1919 a suggestive program of educational legislation based upon the present emergency in our national life.

Each topic discussed falls, as a rule, under three distinct heads: (1) Historic background; (2) Summary of present organization or status; and (3) Reasonable standards of attainment.

THE AFTER-WAR PERIOD AND NATIONAL PROGRESS.

The legislatures in their present session will have to deal with many vitally important educational problems, some of them of long standing, but which now, in the light of war experience, have received new vital importance, and others resulting from the great issues of the war.

1. The first problem is that the schools shall be made to serve America as a nation more completely than now. This involves not only school education in its generally accepted understanding, but includes the whole problem of "Americanization."

There are in the United States nearly 6,000,000 persons over 10 years of age unable to read or write (700,000 of them young men who were liable to recent draft laws). Fifty-eight per cent of these illiterates are white persons; 28 per cent are native-born whites, and 30 per cent are foreign-born whites; 40 per cent of the rest are Negroes.

To educate all its people without exception is both the duty and the right of democracy. If these people have been deprived of educational opportunities in their youth, it is the duty of the Nation to extend this blessing to them now in their years of maturity; if these people have neglected their earlier opportunities, democracy has the right to demand that they correct the deficiency with public assistance at once.

2. The second problem is concerned with the health of the Nation. The war has disclosed many things in regard to physical health that we are loath to talk about. Medical examinations of the war draft at home and in the cantonments disclose (a) that under the first selective draft 730,756 men were rejected for physical reasons; (b) that on this basis about 30 per cent of the entire Nation are more or less physically unfit.

Most of these persons might have been saved for productive occupations, and for happy, wholesome lives, had their health and physical education been properly looked after while they were children in school.

3. The third problem is that of a higher level of educational culture for the masses of the people, whether in town or in country, in order that the Nation may be able to hold its well-earned leadership in the new international relationships which have come to us.

(a) This calls for a more thorough education for all people—young and old—based on national and local needs to challenge more fully than heretofore to highest national endeavor, by providing the large measure of leadership required in a great democracy.

(b) This also calls for a more systematic technical and practical preparation through the schools for the ordinary occupations, whether in agriculture, in the other industries, in trade, or in home-making.

Wholly aside from the native and alien adult illiterates, our public schools do not reach all the people of school age. On the basis of school population and enrollment *17.4 per cent of the people of school age are not enrolled in school.*

School terms are so short in many States and compulsory attendance so badly enforced that *the school life of the average person growing up in rural sections is only 4.5 school years of 140 days each. In urban communities conditions are better, but far from satisfactory.* Until these conditions are changed the great measure of intelligent leadership can not be forthcoming.

4. The final problem deals with (1) the readjustment of the millions of young men who have taken part in the mighty affairs of war and through it have acquired a new type of education while in their country's service, who will find it difficult to adjust themselves to old conditions (notably in the country and small towns), and (2) the women in these sections who, relatively speaking, have stood still educationally during this period.

HOW THE EMERGENCY MAY BE MET.

The first step would be to take an inventory or "survey" of the educational assets and liabilities in the State, and on the basis of this study formulate a program of educational legislation to extend over a period of years.

Such a study would disclose that one sovereign State at least spends less than six dollars per year per child for school education; that the United States spends more for chewing gum than for school books; more for automobiles than for elementary and secondary education; and more for the wages of an average chauffeur than for the salary of an average teacher; that tens of thousands of our native-born children are permitted to be taught American history in a foreign language—the Declaration of Independence and Lincoln's Gettysburg speech in German and other tongues, and that we permit men and women to work in masses where they seldom or never hear a word of English spoken.¹

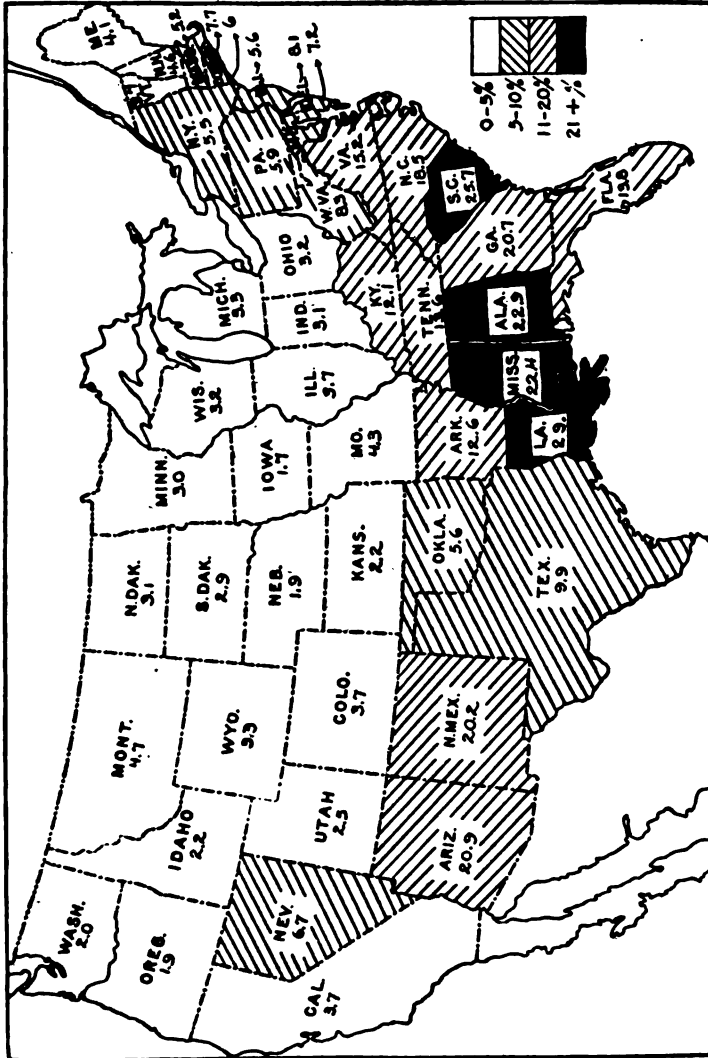
Such a legislative program would include at least the phases of the subjects enumerated below:

1. A businesslike State system of school organization and administration.

¹ See Annual Report of the Secretary of the Interior, 1918, p. 24.

2. Establishment of an effective unit for greatest efficiency in local school administration.

3. Readjustment of elementary and secondary education on the basis of (a) education for health; (b) education for citizenship; (c) education for life occupation; and (d) education for leisure.



TOTAL ILLITERACY, 1910

This map contains the per cent of adult illiteracy—persons above 10 years of age—on the basis of total population, according to the census of 1910.

4. Reorganization of rural education to provide rural communities with adequate elementary and secondary schools of agricultural type.

5. A liberal system of school support to equalize educational opportunities among all the people.

6. Provision for suitable school grounds and buildings.

7. Preparation of an adequate staff of teachers.
8. Provision for a modern system of certificating teachers, based on a gradual increase in professional requirements.
9. Adequate provision for living salaries for these teachers; longer tenures and retirement pensions.
10. A liberal plan under which to provide textbooks in the schools.

II.—GENERAL ANALYSIS OF SCHOOL ORGANIZATION AND ADMINISTRATION.

STATE EDUCATIONAL ORGANIZATION.

The new and enlarged conception of education is adding new importance to the chief educational office in the several States—i. e., the State Department of Education. The office, as originally created in the older States, was chiefly clerical and statistical, much like the now passing ideas of the functions of the old county superintendency. Almost any person chosen from the general electorate could fill the position to the satisfaction of the public.

But the demands of to-day require a new type of educational leadership, able to administer the manifold problems of modern school organization and administration, general education, school sanitation, industrial and vocational education, inter-relation of the public and higher schools, and educational legislation

STATE BOARDS OF EDUCATION.

Modern educational development is toward the State board of education as the administrative head of the State's educational system. Thirty-seven States leave the entire direction of the public school system to such boards. Several States have no State boards; in several others, boards have been organized since the passage of the Smith-Hughes Act to administer the funds provided under this act; and in others again, the State boards of education administer only the higher educational institutions, as the university, agricultural college and normal schools.¹

COMPOSITION OF THE BOARD.

Of the 37 States with State boards of education, 8 have ex-officio boards, which usually comprise the governor, the superintendent of public instruction and one or more other State officials such as secretary of state, attorney general, treasurer, auditor, etc. Of the 28 States with appointed State boards, 22 leave the appointment to the governor, subject, in most cases, to approval of the State senate; four States leave the selection of the boards to the State legislature; one State puts it to popular vote; and in one State it is left to the State superintendent of public instruction.

¹ For details, see Bureau of Education, Bulletin, 1915, No. 5.

APPOINTMENT BY GOVERNOR HAS GREAT MERIT.

1. It recognizes the executive head of the State as responsible to the people for the efficiency of every department of the public service, and tends to make the board responsible to the public.
2. It centers responsibility where it can be definitely located. When the legislature elects it is difficult to locate responsibility.
3. It provides against abuse and protects the board from undue political interference.

ELECTION BY POPULAR VOTE MORE DEMOCRATIC.

1. This method gives the people a direct voice in the selection of the men who direct the schools of the State.
2. Election of the board members by popular vote must in any case be on a nonpartisan ticket, and based solely on probity and ability.

SIZE OF BOARD, TERM OF OFFICE, AND MODE OF RETIRING MEMBERS.

The present tendency is toward a State board composed of from five to seven members holding office for a period of five to seven years and retiring one each year, thus perpetuating the personnel of the board. The smallest boards are usually composed of ex-officio members and may be regarded as representing the passing type. In 14 of the 37 States the boards range from eight to 12 members. A board of this size is not too large for working efficiency and is sufficiently large to create continuity of service provided it is organized to retire in small groups. In the case of all the ex-officio boards, the term of office is fixed by law and ranges from 2 to 4 years. In such boards the members usually retire in a body.¹

POWERS AND DUTIES OF A WELL-ORGANIZED STATE BOARD OF EDUCATION.

The State board should be primarily a lay board, representing the larger educational policies of the public, delegating the professional side of education and the administration of their general policies to their appointive executive official, the State superintendent of public instruction, or commissioner of education, and the heads of the several higher educational institutions. The board should be composed of from five to seven members appointed by the governor by and with the consent of the senate, the term of office to be five or seven years, one member to retire each year or two in each biennial period, thus perpetuating the board's continuance and making it permanent. Vacancies should be filled by the governor. The appointment should be for absolute worth and regardless of residence, occupation, party affiliation, religion or sex. The members

¹ For a complete study of this subject, see Bureau of Education, Bulletin, 1915, No. 5.

should serve without remuneration except for a reasonable per diem and actual traveling and other necessary expenses.

The general powers and duties of the State board should be as follows:

1. To have general oversight and control of the public-school system of the State.¹
2. To select the State superintendent of public instruction to be executive official of the board.
3. To require uniform records and reports, in form to be prescribed by the superintendent of public instruction, from all educational institutions supported by the State, and from all other organizations doing educational work receiving State accreditation and recognition.
4. To classify and standardize under the direction of the State superintendent, the public schools of the State.
5. To adopt rules and regulations for the sanitary inspection of schools and for the physical examination of school children; and, in conjunction with other State authorities, to see that the rules relating to school health, compulsory education, and child conservation are enforced.
6. To have general control of all such educational institutions as the schools for the deaf and the blind and industrial schools for boys and girls.
7. To act as a board of control for the State library and historical collections.
8. To transmit to the governor and the State legislature a periodic report covering all the activities of the State's higher educational institutions and the State department of public instruction in its relation to all public elementary and secondary schools and the above-mentioned higher educational institutions of the State.

STATE DEPARTMENT OF EDUCATION.

The average State department of education has developed more or less independently, paralleling the several State boards of education with functions centered in the administration of the elementary and secondary schools of the State. The executive head of this board—the State superintendent of public instruction—was formerly a political official in nearly all the States. Greater efficiency in school administration now demands a change. The superintendent is beginning to be recognized as the chief educational official in the

¹ In some of the States the proposed State boards of education would be organized to have control of all the schools, including the higher institutions. This would particularly be true of States seeing fit to enlarge the powers of the board now in control of higher education to include also the general oversight of the elementary and secondary schools.

State, whose task it is to organize and direct the educational forces within the State. The office requires the largest ability. It is indeed hard to conceive of a more important office or a more difficult position to fill well. At all times it calls for a person of great tact, good initiative, and much executive ability.

THE STATE SUPERINTENDENT: HOW CHOSEN.

In 31 States the superintendents are elected by popular vote; in 10 States they are appointed by the governor and in seven they are appointed by the State board of education.

OBJECTIONS TO SELECTING THE STATE SUPERINTENDENT BY POPULAR VOTE.

1. This method of selection limits the field from which to choose as the superintendent must be a citizen of the given State. In States where the superintendent is appointed by the State board of education or by the governor, this official may be selected from the country at large. Such freedom of selection is clearly in the interest of better service.

2. Where the State superintendent is selected by popular vote the salary is fixed by law. The salary can not be adjusted to fit the person desired; but a person must be found to fit the salary.

3. Where the State superintendent is elected by popular vote the term of office is short, two to four years, and reelection is uncertain. This lack of continuity in the service is a serious handicap to the superintendent, however capable.

4. This method of appointment makes the office political and subjects it to all the fluctuations of party and factional politics.

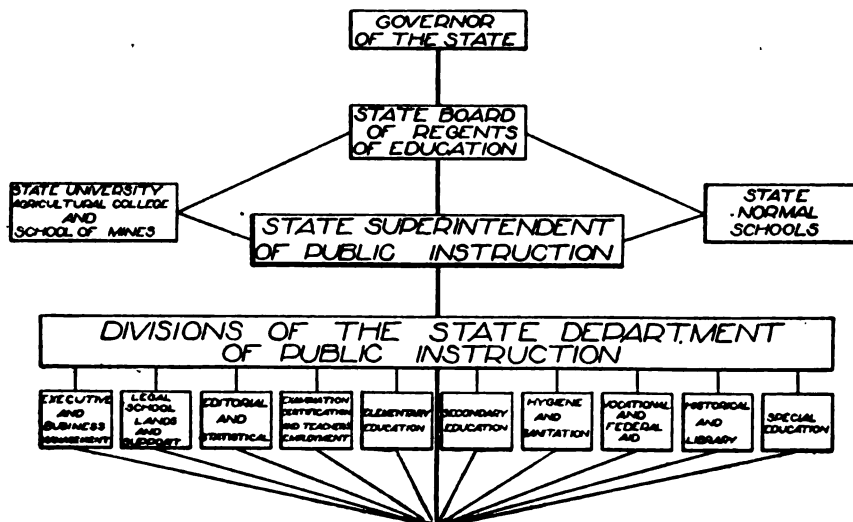
THE STATE SUPERINTENDENT AS EXECUTIVE OF THE STATE BOARD OF EDUCATION.

The modern trend is toward a capable State board of education organized on a nonpartisan basis. The best interests of the service would seem to require: (1) That this board be given the power to appoint the State superintendent; (2) that it be free to select him from the country at large; (3) that it have authority to pay whatever salary is necessary to get the best man for the position; (4) that it make the appointee a member of the board and its chief executive officer; and (5) that it keep him in the service as long as he proves effective and supply him with an ample staff of assistants to do his work.

With the State board of education organized on this basis the position of State superintendent stands first in responsibility and in opportunity to render executive service. As executive official he administers the various divisions of the State department of education and also represents the State board as its professional repre-

sentative in all the higher educational institutions of the State. This organization is illustrated in the following graphic illustration of the proposed reorganization of a State board of education:

PROPOSED PLAN FOR ORGANIZATION OF STATE DEPARTMENT OF EDUCATION



This is a graphic representation of a proposed plan for the organization of a State department of education contained in the report of the State-wide educational survey recently completed by the Bureau of Education for the Legislature of South Dakota.

The reorganized State department of education should be comprehensively planned on lines of approved business principles. The most important business in the average State is education. If the State is to get full returns on its educational investment the methods, means and ways outlined must be of the most approved known to experts in school administration. There should be ample provision made for as many subdivisions of the department as may be necessary to administer the office to the best interest of the public.

This important office should be based on the following powers and duties:

1. The State superintendent should be the executive official of the State board of education and executive head of the State department of education and should enforce all the rules and regulations made in conformity to law by the State board for the public elementary and secondary schools.

2. He should have supervision of all the different divisions of the State department of education and should be held responsible by the State board for the proper administration of the duties of each such division.

3. He should, in cooperation with the heads of the State's institutions for training teachers, and in conformity with law, prescribe courses of study for these training schools, standards for the certification of teachers, and methods for the validation of teaching credentials from other States.

4. He should, as the professional representative of the State board of education, cooperate with the presidents and faculties of the higher educational institutions of the State.

5. He should have such other powers as under law belong to the office of State superintendent of education.

UNITS OF ORGANIZATION FOR THE MANAGEMENT OF THE SCHOOLS.

Nearly every phase of school organization is bound up in some way with the geographical unit utilized as the basis of school maintenance, supervision, and general administration. If the unit of organization is very small it becomes impracticable for school taxation and supervision; if too large, its supervision is difficult and generally ineffective. The growth of school education in entire sections of the country has been retarded because of bad school organization; while other sections, less fortunately situated in other ways, have been able to make exceptional progress in school reorganization because favored by modern laws on this subject.

Three distinct units of organization are in use at the present time in the United States—the district, the township, and the county. In addition, there are several instances of mixed systems in which the management rests both on the district and on the township, or county.

Experience has, however, taught that *for the greatest administrative efficiency in education, the unit of administration should conform geographically to the unit used for civil administration.*

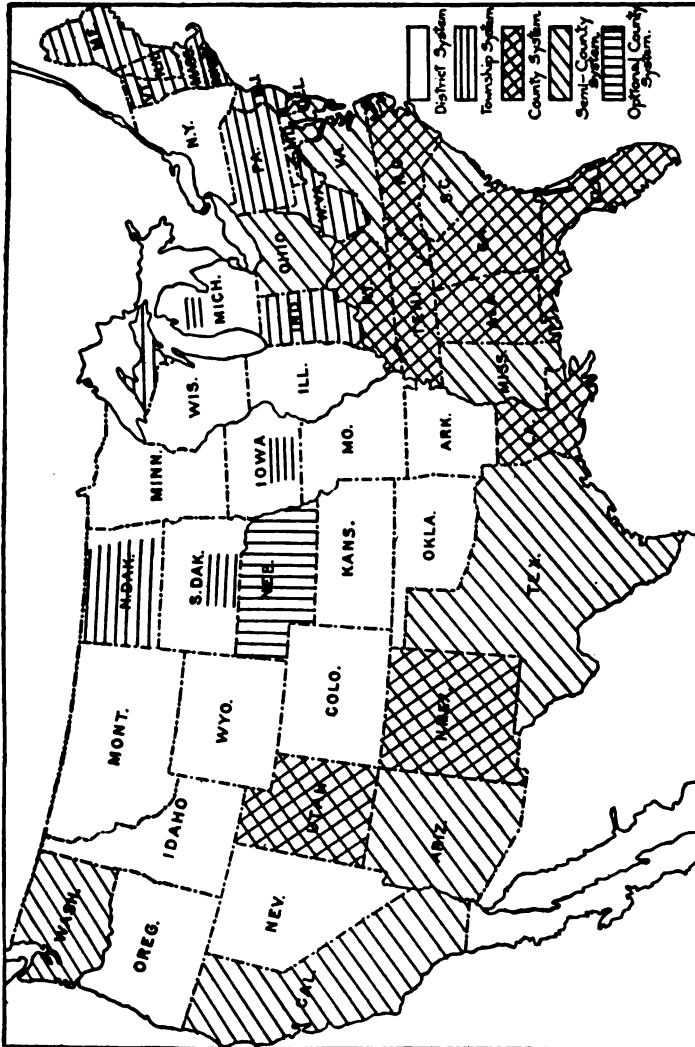
BRIEF STATEMENT OF SCHOOL ORGANIZATION.

The small local district was the original pioneer organization, particularly in the North and West, and generally preceded school legislation. It began as a necessity on the edge of the New England wilderness long ago and was later continued for much the same reasons in the westward march into the interior of the continent. The town (township) system for school purposes was originated in New England and prevailed from the very beginning in all organized towns. County organization originated in the South. Here plantation life prevailed, agricultural areas were large, with a widely scattered population and little village life. This called for a larger unit of organization for civil purposes which was supplied by the

old English county. The latter also began the unit for school purposes. The following map shows graphically the different units of school organization in use throughout the country.

THE DISTRICT UNIT.

The term district unit is used to mean a small geographical area served by a single school and occasionally two or more schools,



DIFFERENT UNITS OF SCHOOL ORGANIZATION.

This map shows graphically the different units of school organization in use throughout the country. The county unit, in one form or another, is making steady headway.

under one board of education. This board has general charge of the local school, including care of the school premises, choice of teachers, the right to fix the teachers' salaries, and establishment of the policy which shall govern the work of the schools. The board

is amenable to the annual school meeting which elects its members, votes the taxation—except States without local taxation—determines the length of school year, etc.

The small district, which has been considered more democratic than the other forms, is beginning to decline in every section of the country for the obvious reason that it was organized as a pioneer system at a time when it was the only feasible plan. But with the passing of pioneer conditions and the development of modern industrial life, a larger and more centrally controlled system of organization seems desirable.

THE TOWN OR TOWNSHIP UNIT.

People have begun to realize that the small district has outlived its period of real usefulness and ought to be supplanted by a more effective unit of organization. In New England the more compact township organization has already driven out these local districts. The same is true in Indiana and other States in the Middle West. There is a recent movement on to go one step farther and reorganize both district and township States on the larger and more effective county unit of organization. *So far as New England is concerned, the town system is unquestionably the best unit of organization for management of the schools in that section of the country because of the fact that the town is also used as the unit in civil administration. Elsewhere in the country a still larger unit would seem advisable.*

THE COUNTY UNIT.

Nineteen States are organized wholly or in part on the county unit basis for school administration. Of these Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, New Mexico, North Carolina, Tennessee, and Utah may be classed as of the pure county type; that is, in which practically the entire management of the schools rests with the county board of education. Arizona, California, Delaware, South Carolina, Texas, Virginia, and Washington belong to the mixed or semicounty type in which the authority is divided between the county board and either township or local district boards. Of the above States, Kentucky, Tennessee, Utah, and New Mexico have recently changed from the district unit of organization to the county unit, and Ohio and Texas from the district unit to the semicounty organization. The most recent State to reorganize on the new plan is New Mexico. Of this reorganization, State Superintendent Johnathan H. Wagner says, in part:

We now have the county board of education which has charge of all the schools in the county. This is proving a wise provision, as it centralizes the administration of the county schools. It has already stopped all financial leaks and better qualified teachers are being employed. It is a great deal more economical than the old system, as all counties are required to work under the budget system.

It is generally conceded that the satisfactory progress in consolidating schools, in the establishment of rural high schools, and the introduction of industrial work, now going on in certain States, could never have been accomplished to such a degree as it has been, were it not for county organization.

AN EFFECTIVE COUNTY ORGANIZATION.

The county unit, to be thoroughly effective, must make provision for a *well centralized business administration without depriving the people of their local initiative in school matters*. The county board and the county superintendent would administer the general school affairs and equalize educational advantages to all the people of the county while *each school community would be represented by one sub-director appointed by the county board or, if desired, elected at the annual school meeting*; while the school funds of the county would be expended by the county board of education for the general maintenance of all the schools. *But the local school community should invariably retain the right to levy taxes and issue bonds for extraordinary school purposes*, such as acquiring additional land sites, erecting new buildings, etc. This is a guaranty of local autonomy; for where the right of taxation is vested, there is the real power.

POWERS AND DUTIES OF A WELL-ORGANIZED COUNTY SYSTEM OF EDUCATION.

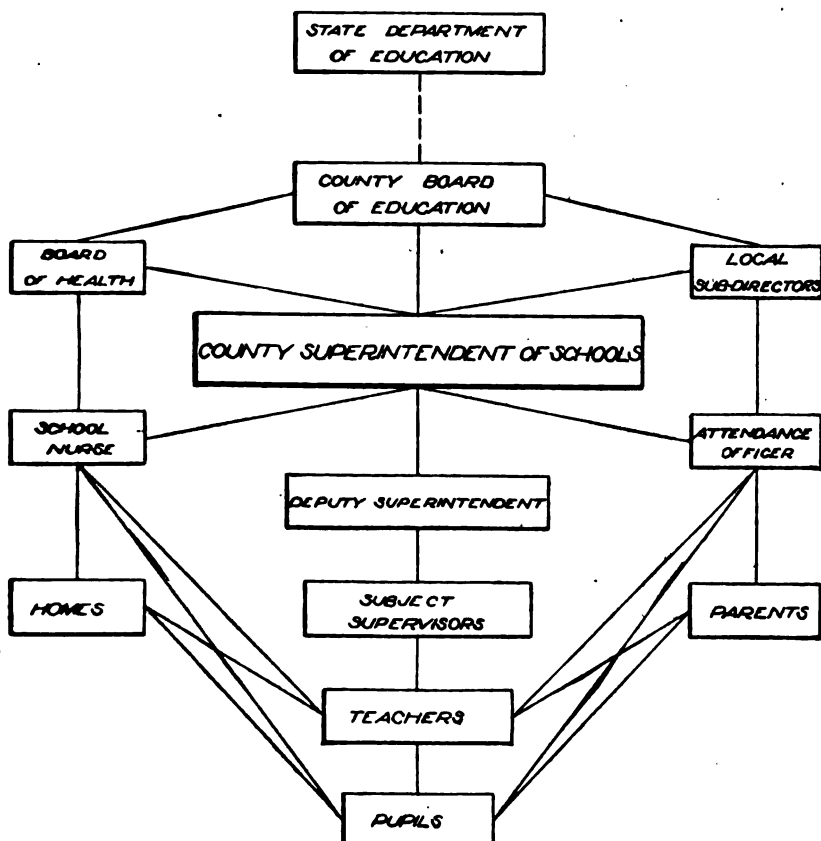
This paragraph is intended for those States only which are organized on the county unit for general school supervision and which are making use of the county as the administrative unit in ordinary civic matters. It is the conviction of progressive educators that the average State can best attain its highest efficiency and more effectively influence school education by reorganizing its schools on a practical county unit basis. This can be done effectively and economically without in any way interfering with real democracy in education. This type of organization contemplates the establishment of (1) a county board of education to have the management of the educational affairs in each county; and (2) the election by the county board of education of a professional county superintendent to be the chief educational official of the county and the executive officer of the board.

THE COUNTY BOARD OF EDUCATION.

This board, in organization and function, should be a prototype of the State board of education explained above. It should be composed of five or seven citizens selected from the county at large, known for their ability and probity, and elected for a five or seven year term from the county at large or from electoral districts on a nonpartisan ticket. One term should expire each year. Vacancies on the board should be filled by the county board of commissioners

or equivalent administrative organization for the unexpired term. The board should receive all necessary traveling expenses and a reasonable per diem to compensate them for their time. The board should be strictly legislative, leaving the executive duties to the county superintendent.

PROPOSED PLAN FOR ORGANIZATION OF COUNTY SYSTEM OF EDUCATION



This is a graphic representation of a county plan of organization contained in the report of the State-wide educational survey recently completed by the United States Bureau of Education for the Legislature of South Dakota.

The chief powers and duties of the county board of education may be summarized as follows:

1. To enforce the laws relative to education and the rules and regulations of the State board of education within their respective counties.

2. To elect the county superintendent and all necessary supervisors and office assistants; also to elect one director for each school

community within their jurisdiction, who shall be the custodian of local school property and represent local needs before the county boards.

3. To have direct charge of all county schools outside of incorporated city districts, including the closing of unnecessary schools, building new schools, consolidating schools, and conveying children to school, and organizing rural high schools.

4. To elect all teachers needed in the county schools, on nomination of the county superintendent.

5. To levy a uniform school tax on all the taxable property of the county under legal limitations; and to expend the funds thus procured to equalize educational advantages among all the school children of the county.

6. To exercise all other powers and duties not enumerated above, but which are prescribed by law.

THE COUNTY SUPERINTENDENT OF SCHOOLS.

The rapid changes in American life have thrust new responsibilities on the superintendent as well as on his teachers. He still retains the clerical and financial duties given the office at its founding. The instructional work at the schools has grown in importance and required much of his time. The selection of textbooks and school equipment, however, is left more and more to the superintendent. The holding of institutes for teachers and the annual meetings of school officers are recently added responsibilities unknown in the day of the early superintendency. To perform these duties satisfactorily, the superintendent must be an expert in the instructional and administrative phases of teaching. The office demands first of all a good organizer; it requires a person of exceptional business ability; he must be a person of unlimited energy and withal a man who has the courage of his convictions.

Thirty-nine States have county superintendents. The New England States are organized in charge of town (township) or town-district superintendents, while New York, Virginia, and Nevada have district superintendents. The term of office in 14 States is four years; in 1, three years; and in 23, two years. In 29 of these States the county superintendent is elected by the people usually in the same manner as other county officers. In the rest of the States they are appointed by a county board of education or its equivalent, and in the case of Delaware, by the governor; and in New Jersey, by the State commissioner of education.

The most important problem is to remove the office entirely from party politics and place the superintendency on a professional basis with a permanent tenure and sufficient salary to attract the best persons in the profession to this exceptionally important office.

In electing the county superintendent, the county board of education should not be restricted to the county or even the State. The best candidate from anywhere in the country should be selected.

The board should not be restricted by a candidate's religion, party affiliations, or sex. The term of office should be long, though

at first probationary. The salary should be not less than \$2,500 per annum in all well-established counties.

The chief powers and duties of the county superintendent should be—

1. To act as executive officer of the county board of education and to administer, under its direction, the educational policies determined upon by the board.

2. To act as chief educational officer of the county, in which capacity he should represent the county board of education.

3. To see that compulsory-attendance laws are enforced and child-welfare laws obeyed.

4. To nominate for appointment by the county board of education all deputy superintendents or professional supervisors required by law.

5. To supervise the class-room practice of all county schools, either in person or through his assistants.

6. To carry out all policies of the county board and have charge, under direction of the board, of all schools, including continuation-school activities, night schools, part-time schools, short courses, and all other types of education undertaken for the promotion of vocational education and other education within the county.

7. To have charge of health education in the county, including health inspection made in conjunction with the county medical authorities, and to direct the work of the school nurse or nurses, if such be appointed.

8. To keep full records of all educational activities within the county and to make reports from time to time to the county board of education and to the State superintendent of education.

9. To perform such other duties as by law belong to the office.

III.—SCHOOL POPULATION, ENROLLMENT, AND ATTENDANCE.

SCHOOL CENSUS.

By school population is meant the ages between which the public schools are legally open to the education of children. A glance at the accompanying table discloses considerable variance in the legal ages in several States. The widest range of ages is from 4 to 20 years (Wisconsin and Oregon), and 5 to 21 years in 7 States (Maine, Iowa, Nebraska, New Mexico, Washington, and Mississippi). The narrowest range is from 5 to 16 years (New Hampshire and Massachusetts). In 17 of the 43 States where a census enumeration is made, the range of ages is from 6 to 21 years. No school census is taken in New Jersey, Delaware, South Carolina, and California. A grouping of the range of ages, with the number of States in each group, is given on the next page.

Age	Number of States.
7 to 20.....	1
7 to 21.....	1
7 to 17.....	1
4 to 16.....	1
6 to 16.....	2
5 to 20.....	2
4 to 20.....	2
6 to 20.....	2
5 to 18.....	2
5 to 16.....	2
6 to 18.....	5
5 to 21.....	7
6 to 21.....	16
Total.....	44

PROPOSED CHANGES.

A school census should be taken annually in every State. The best time to make this enumeration is at the beginning of the school year. It should be made by the county board of enumeration or similar board. From 5 to 18 years is the best range of ages to include in the school census, because this is the natural school age of the normal child.

Because there is no uniformity in range of ages and no enumeration in four States, the only available statistics of school population is an estimate calculated from reports made to the United States Census Bureau. The ages included in the census enumeration bear little relation to the ages of children actually in school. The normal child begins school at 5 or 6 years of age and completes the high school at 17 or 18. Very few children are in the elementary or secondary schools above the age of 18.

COMPULSORY AGES.

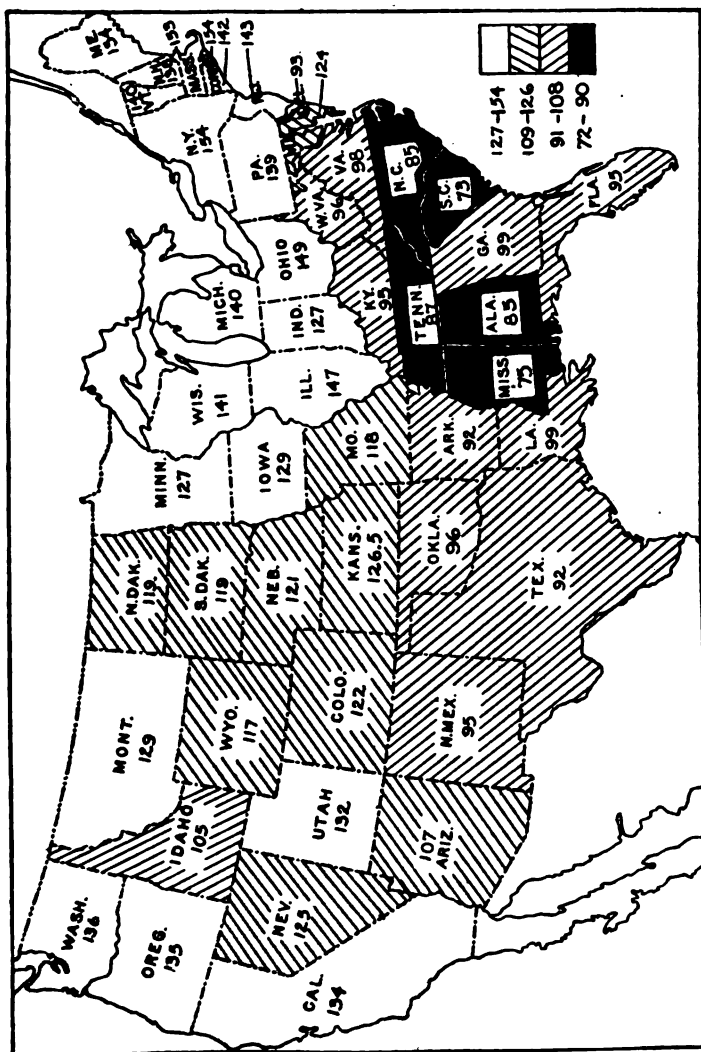
Every State has an age limit for compulsory attendance. The lowest range of ages is from 8 to 12 years (Virginia and North Carolina). The highest is from 8 to 18 years (Idaho). In 10 States the range is between 8 and 16 and in 10 States between 7 and 14. The range of ages and the number of States in each group follow:

Ages.	Number of States.
7 to 12.....	1
8 to 18.....	1
9 to 15.....	1
8 to 12.....	2
7 to 16.....	4
8 to 15.....	5
7 to 15.....	5
8 to 14.....	9
8 to 16.....	10
7 to 14.....	10
Total.....	48

FEASIBLE CHANGES.

The compulsory period varies from 12 weeks to a full school year. *The age limit for compulsory education should provide at least for the completion of the elementary school course. This would mean an actual attendance of 7 or 8 years. To complete this course would mean attendance for the full time that school is in session*

To complete an elementary school course is none too much education for citizens of a democracy. It was James Madison who said, "A popular government without public education is but the prelude of a farce or a tragedy, or both."



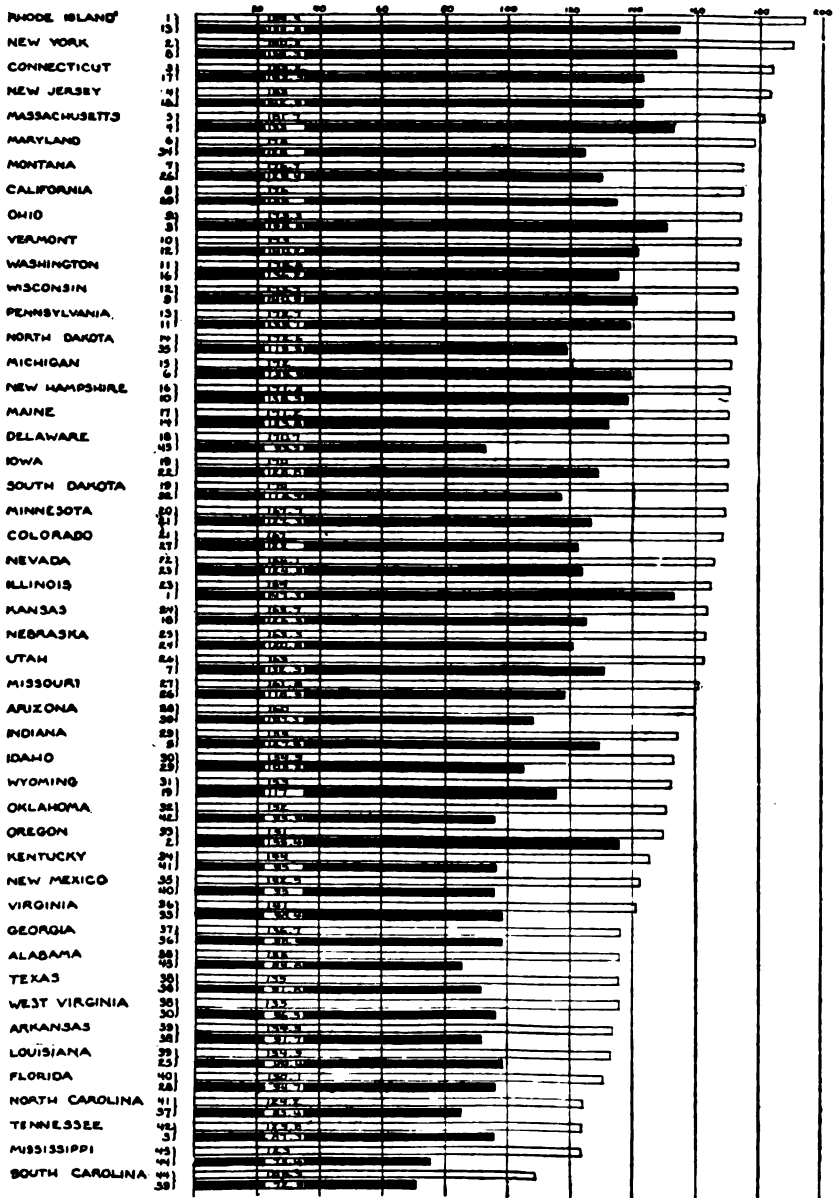
AVERAGE DAYS ATTENDED BY EACH PUPIL ENROLLED.
(NEAREST UNIT) 1915-16.

The average number of days attended by each child ranges from 73 days in the lowest state to 154 days in the highest. This altogether too short term falls far short of the ideal of the all-year school.

SCHOOL ENROLLMENT AND LENGTH OF TERM.

The accompanying table and graph show the average number of days that public schools were kept open, the average number of days attended by each pupil enrolled, and the average per cent of

LENGTH OF TERM AND ATTENDANCE. 1916.



The light line indicates the total number of days the schools were in operation. The heavy line indicates the average attendance.

attendance in each State for the school year 1915-16. The average length of school year varied from 194.3 days in Rhode Island to 108.5 days in South Carolina. *A comparison of average days of attendance for all pupils enrolled, with the average length of term, indicates that the entire school year was not utilized. The per cent varied from 89.9 in Illinois to 54.8 in Delaware.*

This difference between length of term and days attended may be seen at a glance from the several surveys conducted by the Bureau of Education:

Arizona (report for 1915-16):

Throughout the State there is a difference of from two and one-half to four months between the number of days school is taught and the actual number of days attended by the average pupil enrolled.

Colorado (figures for 1915-16):

The average for rural schools as given in the county superintendents' report is 148 days, or about 7 months. For the State as a whole the average number of days attended by the children in rural schools is 106, to practically 5 school months.

Wyoming (figures for 1914-15):

A similar irregularity and consequent injustice is shown in the average number of days attended. Even in a county in which the minimum length of term is 6 months, or 120 days, the average number of days actually attended by each child enrolled is but 89. Schools in this county are evidently not holding pupils in school during the full term, even when the term is a short one, and consequently it is evident that the attendance law is not being enforced.

TABLE 1.—Average number of days public schools were kept open, average number of days of attendance by each pupil enrolled, and average per cent of attendance in each State in 1915-16.*

Location.	Days schools were open.		Days attended.		
	Rank.	Number.	Average.	Per cent.	Rank.
Alabama.....	38	135.0	84.8	62.9	43
Arizona.....	28	160.0	107.3	67.1	39
Arkansas.....	39	134.9	91.7	68.0	38
California.....	8	176.0	134.0	76.2	20
Colorado.....	21	167.0	122.0	73.1	27
Connecticut.....	3	183.2	142.5	77.8	17
Delaware.....	18	170.7	93.5	54.8	45
Florida.....	40	130.1	94.7	72.8	28
Georgia.....	37	136.7	98.9	69.0	36
Idaho.....	30	154.9	105.2	72.0	29
Illinois.....	23	164.0	147.3	89.8	1
Indiana.....	29	155.0	127.4	82.2	5
Iowa.....	19	170.0	128.8	75.8	22
Kansas.....	24	163.7	126.5	77.3	18
Kentucky.....	34	144.0	95.0	65.9	41
Louisiana.....	39	134.9	99.4	73.7	25
Maine.....	17	171.2	133.8	78.2	14
Maryland.....	6	178.0	124.0	69.7	34
Massachusetts.....	5	181.7	153.0	84.2	4
Michigan.....	15	172.0	139.9	81.3	6
Minnesota.....	20	167.7	127.3	75.9	21
Mississippi.....	43	123.0	75.4	61.3	44
Missouri.....	27	161.8	118.5	73.2	26
Montana.....	7	176.7	129.4	73.2	26
Nebraska.....	25	163.5	120.8	73.9	24
Nevada.....	22	166.1	124.9	75.2	23
New Hampshire.....	16	171.5	138.5	80.8	10
New Jersey.....	4	183.0	142.9	78.1	15

* From statistics, U. S. Bureau of Education. † Statistics, 1914-15. ‡ Statistics, 1912-14. § Estimated.

TABLE 1.—Average number of days public schools were kept open, average number of days of attendance by each pupil enrolled, and average per cent of attendance in each State in 1915-16—Continued.

Location.	Days schools were open.		Days attended.		
	Rank.	Number.	Average.	Per cent.	Rank.
New Mexico.....	35	142.5	95.0	66.7	40
New York.....	2	190.2	154.3	81.1	8
North Carolina.....	41	124.2	85.4	68.7	37
North Dakota.....	14	172.6	119.5	69.2	35
Ohio.....	9	175.3	148.9	84.9	3
Oklahoma.....	32	152.0	95.9	63.1	43
Oregon.....	33	151.0	135.4	89.7	2
Pennsylvania.....	13	172.7	139.1	80.6	11
Rhode Island.....	1	194.3	154.8	79.7	13
South Carolina.....	44	108.5	72.9	67.1	39
South Dakota.....	19	170.0	118.9	70.0	32
Tennessee.....	42	123.8	87.3	70.5	31
Texas.....	38	135.0	91.8	68.0	38
Utah.....	26	163.0	132.5	81.2	7
Vermont.....	10	175.0	140.2	80.1	12
Virginia.....	36	141.0	98.4	69.8	33
Washington.....	11	174.6	136.2	78.0	16
West Virginia.....	38	135.0	96.3	71.3	30
Wisconsin.....	12	173.7	140.9	81.0	9
Wyoming.....	31	153.0	117.0	76.5	19
United States (continental).....		160.3	120.9	75.5	

¹ Statistics, 1914-15.

PROPOSED CHANGES.

The schools should be organized on the all-year basis. The term and teaching contract should begin January 1 of each year. The school work should be planned in such a way that, while the teacher is employed for the whole year, actual class work should be regulated by the labor needs in the community.

The all-year school prevents the loss of school efficiency because of a long summer vacation; it minimizes the problem of idleness and vagrancy among city children; it enables children to finish school at an earlier age; and provides a plan whereby, by means of home projects, the field and garden may become vital laboratories for agricultural instruction.

CHILDREN IN AND OUT OF SCHOOL.

The public school is installed and maintained by the State. In measuring its efficiency, the following questions are vital: First, *How many children are to be educated?* Second, *How many are in the public schools?* Third, *How many are in private schools?* Fourth, *How many are not attending either public or private schools?*

The accompanying table and graph give the census, the number and per cent of children in public schools, private schools, and not in any school. The term census, as given in the table, includes children between the ages of 5 and 18 years—the age adopted by the United States Bureau of Education in compiling its statistics.

TABLE 2.—*Children in and out of school.*

(U. S. Bureau of Education, statistics, 1915-16.)

Location.	Rank.	Census.	Number in public schools.	Per cent in public schools.	Number in private schools.	Per cent in private schools.	Number not in school.	Per cent not in school.
Alabama.....	43	740,603	514,601	69.1	17,187	2.5	208,815	28.4
Arizona.....	14	62,608	51,077	81.7	3,367	5.4	8,164	12.9
Arkansas.....	24	546,099	447,726	82.0	6,133	1.1	92,240	16.9
California.....	.....	¹ 571,274	539,688	.....	33,000	.....	.....	.....
Colorado.....	20	225,122	184,471	82.0	7,000	3.1	33,651	14.9
Connecticut.....	.....	¹ 265,483	234,609	82.1	52,283	.....	1,419	.....
Delaware.....	2	52,769	45,327	85.9	5,000	9.5	2,442	4.6
Florida.....	28	256,522	198,365	77.2	8,500	3.3	49,657	19.5
Georgia.....	41	912,227	667,635	73.2	10,000	1.1	234,592	25.7
Idaho.....	15	113,104	95,772	84.7	2,500	2.2	14,832	13.1
Illinois.....	19	1,514,070	1,064,640	71.8	213,780	14.0	215,730	14.2
Indiana.....	18	703,641	564,252	80.2	40,000	5.7	99,389	14.1
Iowa.....	1	583,278	525,579	90.0	42,000	7.2	15,699	2.8
Kansas.....	17	483,731	402,860	83.3	16,051	3.3	64,820	13.4
Kentucky.....	26	699,376	537,008	76.8	33,352	4.8	129,016	18.4
Louisiana.....	45	572,883	320,400	55.7	38,159	6.7	214,412	37.6
Maine.....	3	176,823	149,149	84.3	17,207	9.8	10,467	5.9
Maryland.....	7	357,464	243,077	68.0	30,000	23.6	84,387	8.4
Massachusetts.....	12	830,115	604,023	72.8	122,000	14.7	104,092	12.5
Michigan.....	6	751,494	620,861	82.8	72,982	9.5	57,651	7.7
Minnesota.....	21	617,316	481,583	78.0	38,000	6.2	97,733	15.8
Mississippi.....	31	635,270	492,756	77.6	7,500	1.1	135,014	21.3
Missouri.....	10	890,190	721,752	81.0	65,000	7.4	103,438	11.6
Montana.....	.....	¹ 98,883	102,768	.....	7,000	.....	.....	.....
Nebraska.....	11	345,051	292,725	84.8	12,080	3.5	40,326	11.7
Nevada.....	35	17,515	13,358	76.3	309	1.7	3,848	22.0
New Hampshire.....	9	98,192	67,461	68.7	21,689	22.0	9,042	9.3
New Jersey.....	23	707,229	540,287	76.4	48,000	6.8	118,942	16.8
New Mexico.....	44	118,941	77,062	64.8	5,589	4.7	36,290	30.5
New York.....	27	2,336,165	1,625,777	69.5	278,000	11.8	432,388	18.7
North Carolina.....	13	772,240	640,246	84.0	25,000	3.2	87,994	12.8
North Dakota.....	40	208,011	151,647	73.0	3,500	1.6	52,864	25.4
Ohio.....	22	1,217,544	905,071	74.3	120,000	9.8	192,474	15.9
Oklahoma.....	32	675,598	515,493	76.4	14,915	2.2	145,190	21.4
Oregon.....	25	183,445	142,365	77.6	7,794	4.2	33,266	18.2
Pennsylvania.....	30	2,123,686	1,504,794	70.8	180,000	8.5	438,892	20.7
Rhode Island.....	34	142,152	89,879	63.2	21,646	15.2	30,627	21.6
South Carolina.....	33	542,583	415,766	76.6	10,000	1.9	116,817	21.5
South Dakota.....	42	193,417	134,136	69.5	4,500	2.2	54,771	28.3
Tennessee.....	4	687,087	610,235	88.8	27,000	4.0	49,752	7.2
Texas.....	39	1,388,226	1,017,063	73.0	28,000	2.0	343,143	25.0
Utah.....	8	126,058	108,359	86.0	7,000	5.4	10,699	8.6
Vermont.....	16	84,669	65,380	77.3	8,000	9.4	11,289	13.3
Virginia.....	38	665,716	486,134	73.1	17,568	2.6	172,014	24.3
Washington.....	37	336,148	245,419	73.0	10,261	3.0	80,468	24.0
West Virginia.....	29	401,119	313,873	78.2	4,839	1.3	82,407	20.5
Wisconsin.....	36	686,346	458,102	66.8	70,000	10.2	158,244	23.0
Wyoming.....	5	37,061	32,630	88.0	1,600	4.4	2,831	7.6
United States.....	.....	26,846,976	20,351,687	75.8	1,820,210	6.8	4,675,079	17.4

¹ Enrollment in excess of census.

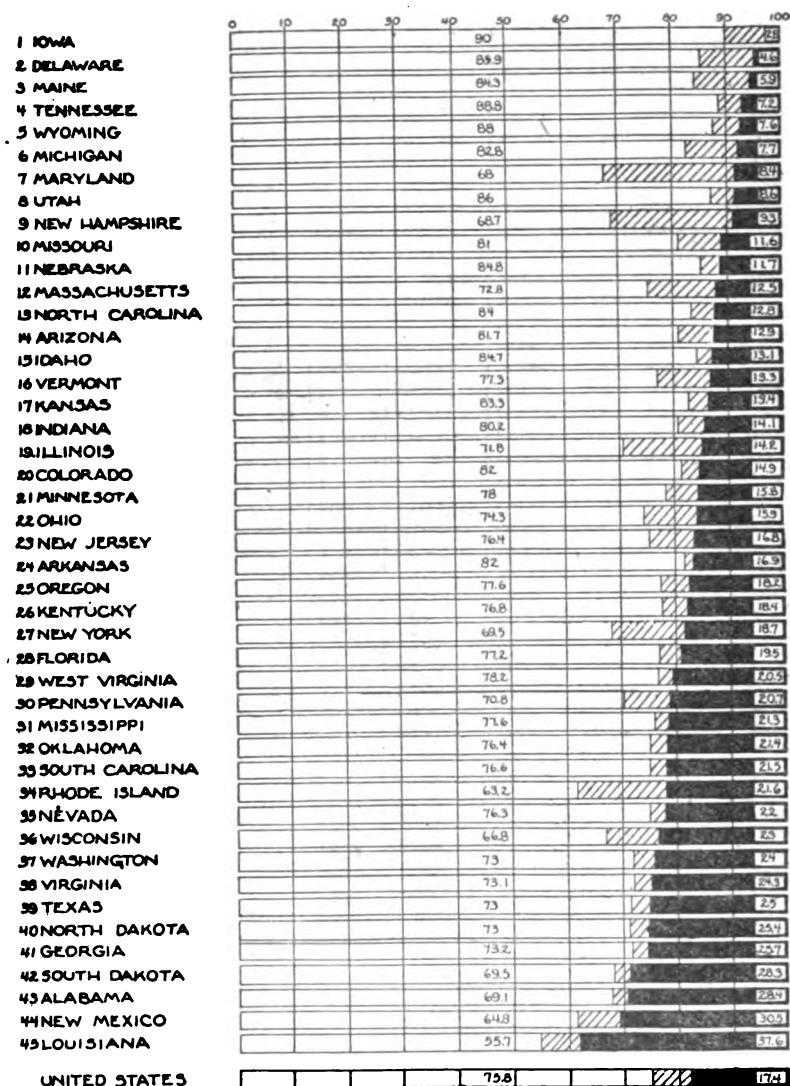
The following is quoted from Bureau of Education surveys relative to the compulsory attendance laws and the enforcement of the same:

Arizona, statistics for 1915-16:

The compulsory age in Arizona is 6 to 18 years, unless the child has completed the elementary school before that age, when he may leave at 14. Eleven county superintendents report that it is well enforced; 3 reported that it is partially enforced. A comparison of the number of days attended to the days taught does not verify the statement of the 11. The large enrollment compared to average daily attendance also indicates laxity in the enforcement of the true intent of the law.

Colorado, statistics for 1914-15:

CHILDREN IN AND OUT OF SCHOOL



UNITED STATES

PUBLIC SCHOOLS PRIVATE SCHOOLS NOT IN SCHOOL

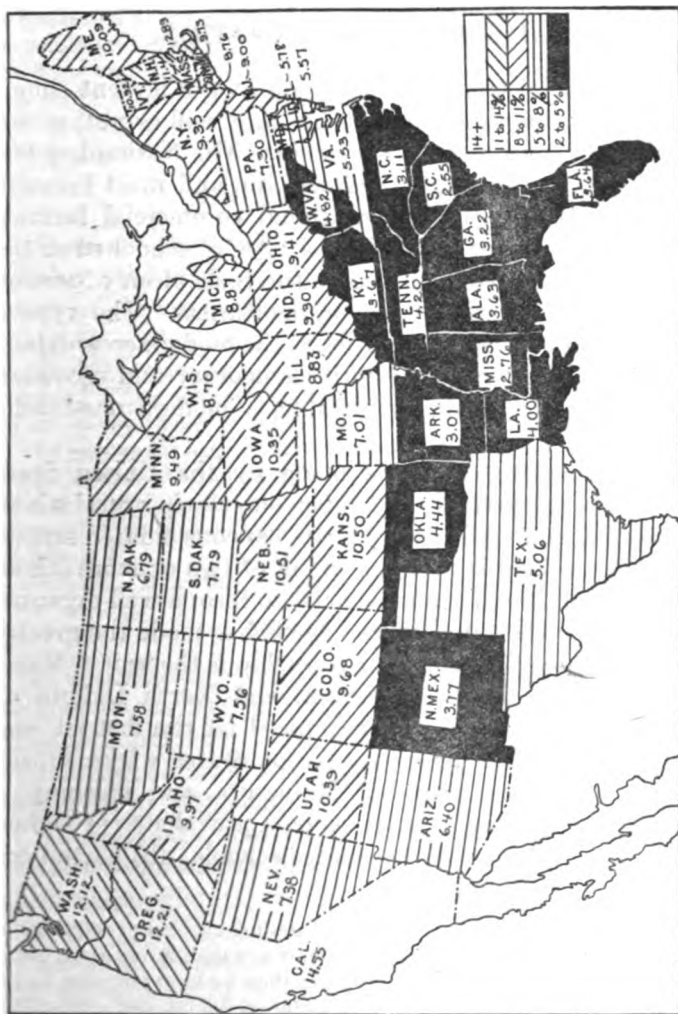
PER CENT OF SCHOOL POPULATION ENROLLED IN THE PUBLIC SCHOOLS
IN PRIVATE SCHOOLS AND NOT IN ANY SCHOOL IN 1915-16.CALIFORNIA }
CONNECTICUT } REPORT ENROLLMENT IN EXCESS OF CENSUS
MONTANA }

The portion of the chart in black indicates the per cent of school population not in school attendance. For the United States as a whole, 75.8 per cent of all children of school age are in public schools, 6.8 per cent are in private schools, and 17.4 per cent are in no school whatever.

Table 31 shows census and enrollment data for children between 8 and 14 years, as given in the county superintendents' reports to the State superintendent for the year 1914-15. In 28 of these counties the number enrolled exceeds the total census

enumeration from 1 per cent to 25 per cent. In one county the number enrolled is equal to the census. . . . The given data are useless for this purpose in 29 counties of the State because of the condition stated. *In the other 35 counties 4,845 children, or 12 per cent of the census enumeration between 8 and 14, are reported not enrolled in school.*

The school census (including children between the ages of 5 and 18) should not be used as a basis for apportionment of school money, but to ascertain the number of children to be educated.



HIGH SCHOOL ENROLLMENT 1915-16.

For each 100 children enrolled in the public schools of the United States 7.49 per cent are in the high schools. The map shows graphically how this per cent ranges from 2.55 per cent in the lowest State to 14.55 per cent in the highest.

All private schools should be open to inspection by school authorities.

Mental and physical incapacity are the only legitimate reasons why a child should not be in the public schools.

Truant officers, not school administrators, should be provided for the enforcement of the compulsory school law.

If private schools are utilized, the qualifications of teachers, the school equipment, the quality of instruction, and the course of study should be measured by the same standards by which the public schools are measured.

As education is the business of the State, it is also the right and duty of the State to see to it that children are kept in school in spite of poverty or need for labor. It is further the right of the State to see to it that provision is made for the enforcement of its educational laws.

IV.—RURAL SCHOOL ORGANIZATION.

The national industrial transition going on at the present time is forcing upon country communities, whether they will or not, a reorganization of the present educational system. The Nation has long since passed from pioneering in agricultural life and must hereafter enter upon an era of scientific international commercial farming. This requires for the country community a type of school education which will do more than give farm people the tools of an education; they must be taught to become real agriculturists. The type of school that can best provide this education is the modern consolidated farm community school, furnishing both elementary and secondary education; or, where this is not practicable, a modern one-teacher school.

There are, according to estimates made by the United States Bureau of Education, approximately 210,000 one-teacher rural schools in the United States, and approximately 10,500 consolidated schools.

By a consolidated school is meant a union of two or more schools of the same district, or in outlying districts, to form a well-organized graded school. Consolidation of rural schools has made the greatest headway in States where the county or township is the unit. Massachusetts, Indiana, Ohio, Utah, Louisiana, and North Dakota are examples of such States. In States organized on the district basis consolidation has made slow progress, except States where subsidy has been offered, as in Iowa, Missouri, Minnesota, and Washington. There are three types of consolidated schools prevalent throughout the United States, as follows: (a) Associated schools; (b) partial consolidation; (c) complete consolidation.

An associated school organization includes a rural trading center or central village and the surrounding country districts that use this center as a trading and social center. The outlying schools retain their independent organizations for local purposes, but are merged into the large district for matters of common educational interest. The school officers of the local districts are retained as boards for the management of their own local schools. In addition, representatives from each local district form an associated board to manage affairs of common interest, such as disbursing associated district funds and employing special instructors. This plan provides an avenue for the extension of supervised industrial courses into the one-teacher rural schools. In such a school organization pupils completing the eight grades in the country generally

continue their high school course in the village center. Such a school further provides ample opportunity for community activities associated with the school. The Putnam Act in Minnesota makes provision for this type of school.

By partial consolidation is meant a plan whereby the outlying rural schools are maintained for the lower grades and the upper grade pupils are transported to a central school. This type of consolidation is prevalent in many conservative districts throughout the United States. In Missouri, the Buford-Colley Act provides for partial consolidation as well as for complete consolidation. It is a more expensive scheme than complete consolidation, but prepares the way for the latter.

In complete consolidation, as the name signifies, the small outlying schools are all consolidated at a central point. The school maintains an up-to-date plant with a carefully graded system, an efficient teaching force, and a course of study embracing both the academic and industrial phases of the curriculum. There are many such schools throughout the United States, especially in the States where consolidation has made the greatest progress. These schools are organized in the open country or about a village or town as a center.

THE MODERN ONE-TEACHER SCHOOL.

There are places where because of geographical conditions the one-teacher schools must continue to exist. In order to best meet the needs of the community such a one-teacher school should contain:

A plant standardized as to light, heat, ventilation, and sanitation. There should be ample provision for teaching the industrial subjects. This would mean a one-teacher building with several rooms and sufficient ground for laboratory experiments in agricultural subjects, and a house for the teacher.

The teacher in charge should be a person who prefers the country to the city and is trained to meet the problems arising in a one-teacher community school. This teacher should be hired for the entire year. During the summer the school work should be largely industrial and should be carried on in connection with projects worked out at home.

A course of study that serves the peculiar needs of the community.

THE CONSOLIDATED SCHOOL.

It is safe to say that the period of experimentation in school consolidation has passed. The movement has come to be accepted as good national policy. The important thing at this time is to see that school consolidation shall come in its best form, otherwise little will be gained by displacing the old type of education.

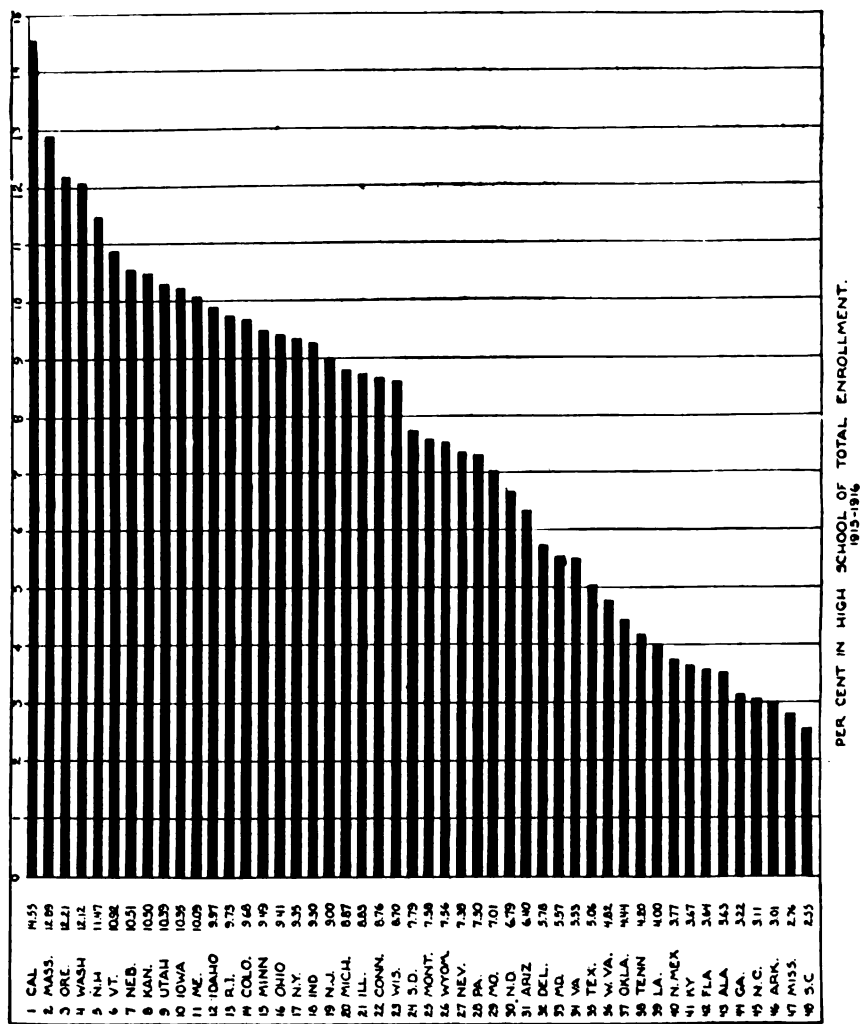
The most satisfactory type of consolidated school is planned to give the rural community just the kind of education required by an agricultural population; broadly cultural and yet practical, preparing them for happy, wholesome remunerative living on the land. Many of the early consolidated schools were planned as big graded schools, offering courses of study in no sense adapted to the needs of rural districts. *The school should be organized with a view to preparing, for the new agricultural era a permanent farming population of highest ideals.* Some of the essentials to be included in a just consolidation law are these:

1. State aid to be given on conditions assuring the State department of education that the school will be properly maintained, organized, and taught.

2. State aid might be given as aid in (a) erecting the new building; (b) for annual maintenance provided (1) that no less than five acres of land be utilized for grounds and experiment plats, (2) that a home be erected on the premises for the principal and other teachers, (3) that the principal and instructor in agriculture, at least, be hired by the year to give all the time to the school and agricultural community, and (4) that the course of study be adapted to the needs of its particular agricultural section.

RURAL HIGH SCHOOLS.

One of the most urgent problems in rural education is to provide the people with easily accessible rural high schools. The percentage of



This graphic chart ranks the States on the basis of the per cent enrollment in high school for each 100 children in the public schools.

country people educated in secondary schools of rural type is amazingly small in contrast with the percentage of city people who have the advantages of city high schools. Rural people who are favorably

situated with regard to town high school facilities take advantage of the latter, although it often draws the farming class away from agricultural activities into other callings. City schools are organized for city children; rural high schools should be organized for rural children. Some people, and farmers among them, hold the false opinion that to distinguish between city and country people in educational affairs amounts to discrimination against country children. Such opinion is based on the assumption that city life is superior to country life which to those who understand it best is really the only normal American life there is.

The present trend is to establish rural high schools of an agricultural type in connection with the consolidated schools, either in the open country or in the rural villages and *to plan the work of these schools so as to meet the needs of all country people, whether they are of ordinary school age or not.*

The legislatures might well pass legislation making provision for the following types of educational activities in connection with the rural high schools:

1. The elimination of illiteracy and Americanization of the foreign born.
2. Continuation schools for people beyond ordinary school age.
3. Part-time schools for people who must work for a livelihood.
4. Educational extension courses for young and old people.

V.—SCHOOL FINANCES.

One of the most vital factors in an efficient public-school system is the law which provides the necessary funds. A school system that has ample funds can have all that is necessary in buildings, in grounds, in equipment, in length of school term, and in teachers adequately prepared for their work.

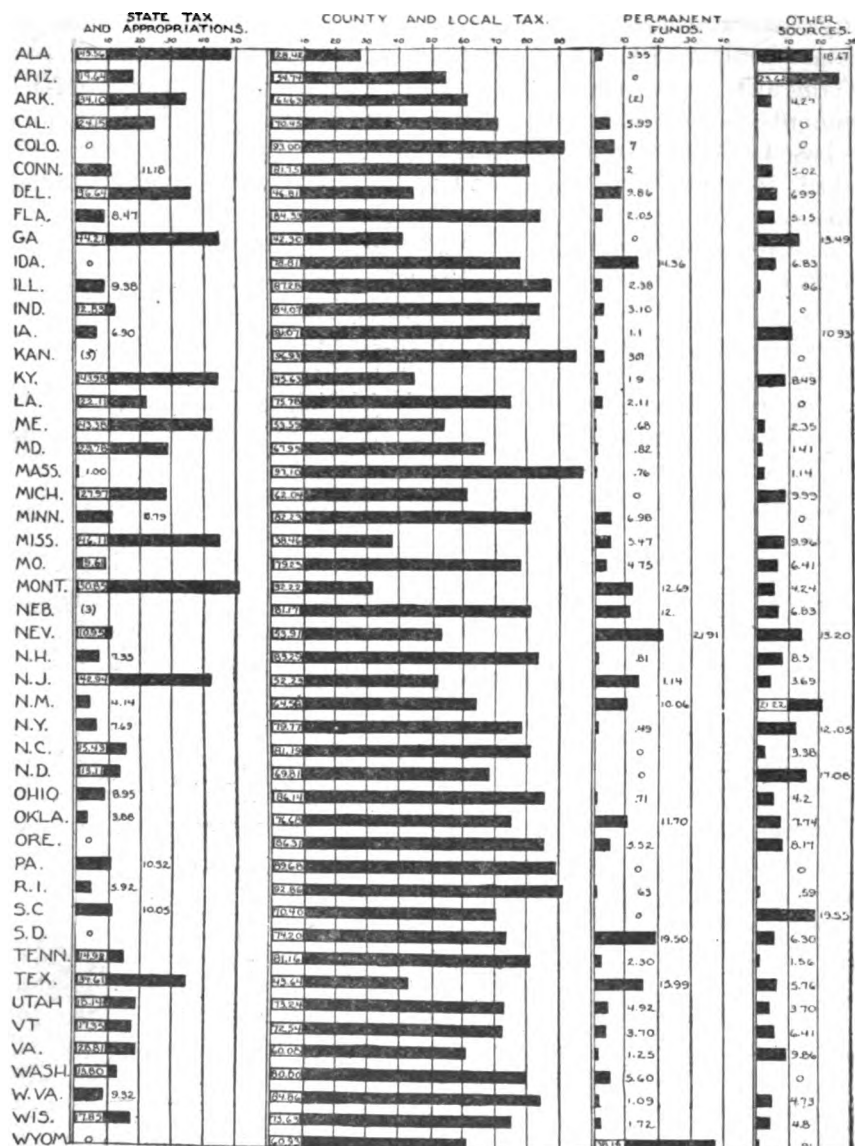
The responsibility for the establishment of an efficient public-school system rests jointly upon the Nation, the State, the county, or other administrative subdivision, and the school community.

STATE AND COUNTY TAXATION.

In every progressive State system of education such areas or units of taxation should be created or continued, if already in existence, as will fully develop the sound American principle that the whole wealth of the State shall be made available for educating all the youth of the State. This is both right and necessary, as in the United States education is largely a state function to be supported like other civil functions.

From a national standpoint there are rich States and poor States in which all the children of all the people should be provided with equal educational opportunity. The same is true from the standpoint of the State as concerns counties or townships, and of counties as concerns local-school communities. But the facts already cited

in favor of Federal aid prove beyond a doubt that practically half of the children of school age in the United States are far from having

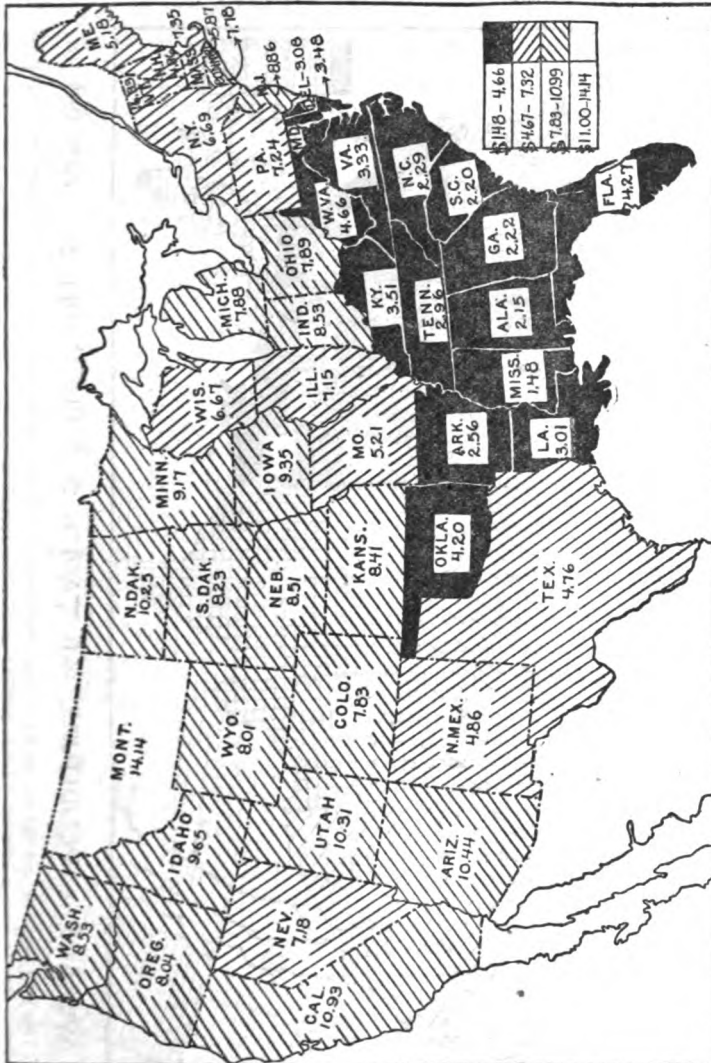


PER CENT of SCHOOL FUND DERIVED FROM EACH SOURCE. 1915-1916.
U.S. BUREAU of EDUCATION REPORT 1917 p. 79

This chart shows graphically the several sources of school revenue in the United States. Unfortunately it is impossible, with the data at hand, to separate county and other local taxes.

equal educational opportunity with the other more fortunate half. There is not a single State in which all the children have equal educational opportunity.

In several States the per cent of all rural pupils completing the eighth grade is less than 30, while the per cent of all city pupils completing the eighth grade is 86. In other words, nearly 300 per cent more of city pupils complete the eighth grade in such States than do farm pupils. The per cent of rural pupils completing the high school in several States is less than 5, while the per cent of all city pupils completing the high school in such States is 29. In other words, over 700 per cent more of city pupils



EXPENDED PER CAPITA TOTAL POPULATION. 1915-16.

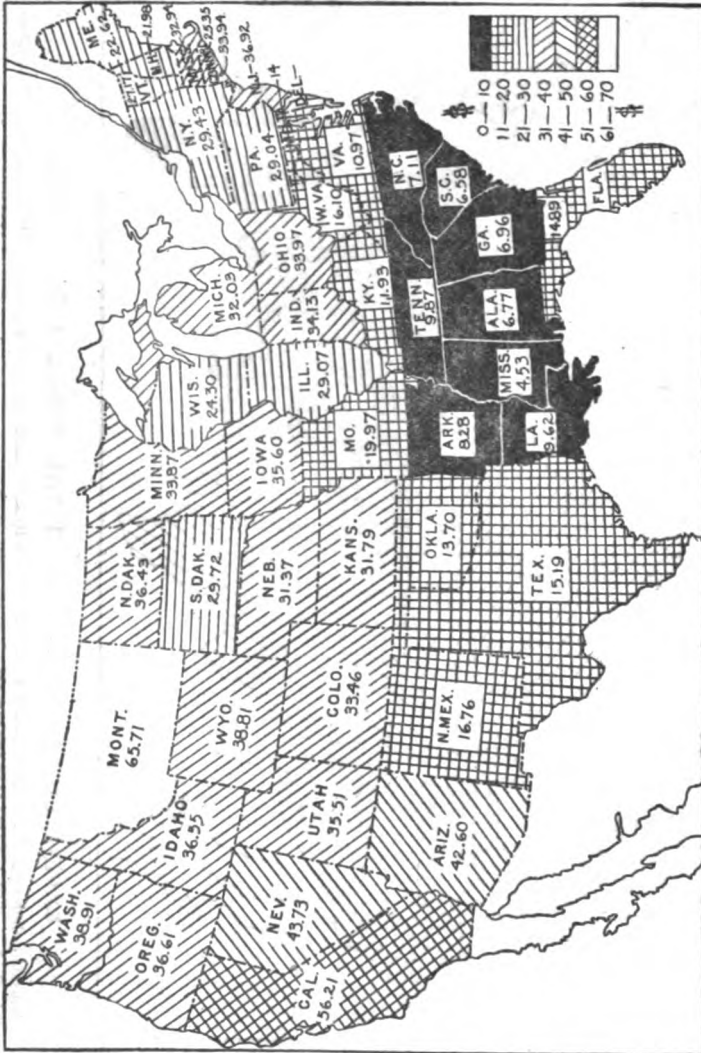
This map shows graphically the total amount spent for education by each State per capita of total population. This varies from \$1.48 in the lowest State to \$14.14 in the highest.

complete the high school in such States than do farm pupils. This illustrates the neglect of rural education in all States.

Much of this discrimination against rural pupils in the meager educational opportunity provided for them comes from lack of appreciation of education on the part of the farm people themselves. But most of it must be charged to the antiquated, unjust, and undemocratic methods in the system of public-school taxation that prevails in many States.

THE COUNTY, THE TAX UNIT FOR GENERAL SCHOOL MAINTENANCE.

A sound and progressive State policy of public education must provide definite plans of support which will insure the successful carrying out of the best educational policies throughout the entire State. *The county should be the responsible unit of local educational*



AVERAGE EXPENDITURE PER CAPITA OF POPULATION. 5-18 YRS. 1915-16

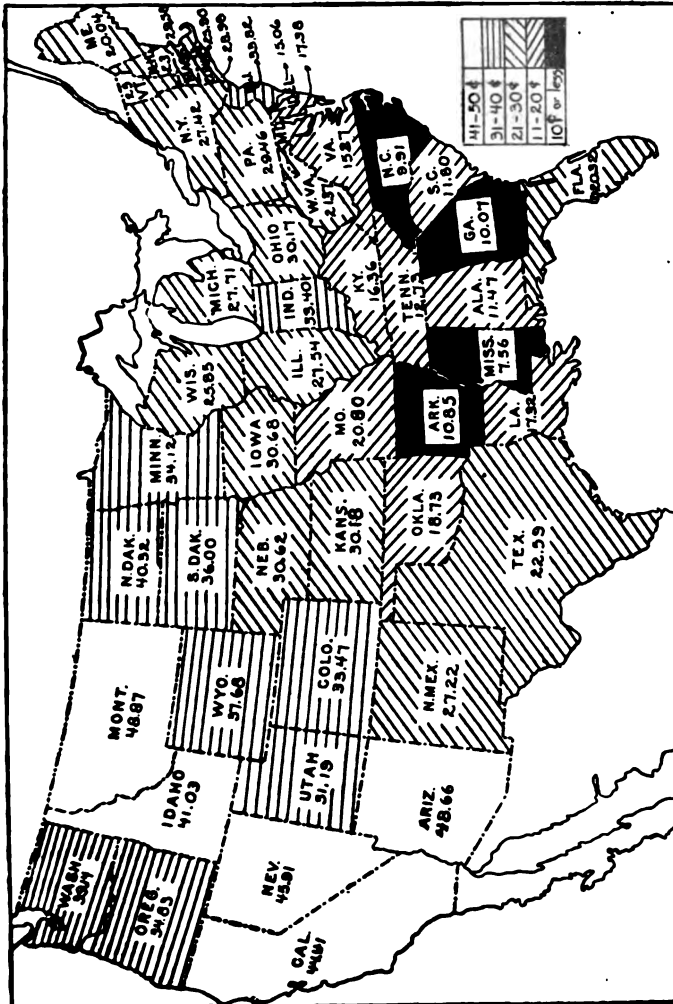
This map shows the average amount expended per capita for each child of normal school attendance age—that is, for the period of years ordinarily included in the elementary and secondary schools.

support in harmony with the plans of the State as a whole. In this manner it will be possible to equalize the conditions of taxation and expenditure within the constituent districts. *The local school communities should be allowed to supplement the county tax in order to more fully realize local ideals, because the county tax may not*

always be sufficient for that purpose. The county tax tends to insure a fair taxation and expenditure throughout its borders, but at that point it reaches its limitations.

A STATE-WIDE TAX EMINENTLY JUST.

In order to safeguard the interests of the State as a whole and develop the larger sections which are in need of help, a permanent State tax is



DAILY EXPENDITURE FOR SCHOOLS. BASED ON PER CAPITA OF AVERAGE ATTENDANCE.
1915-1916

The figures indicate the number of cents expended for each child in average daily attendance. This ranges from 9.90 cents in the lowest State to 48.87 cents in the highest.

necessary. In the second place, the State should levy an annual school tax which, in addition to the income from the permanent funds, would amount to not less than one-third of the total public-school revenue. Such a proportion properly expended will tend to equalize conditions throughout the State. The experience of

some of the most progressive State-school systems, such as are found in California, Montana, and New Jersey, shows the great value of a well-directed State tax of good proportions.

The proceeds of the State tax should be used to extend a special aid to poor districts in the sparsely settled sections of the State where consolidation of schools is yet impracticable. It might also well be used as a stimulus to further consolidation of schools, and in assisting communities to maintain teacher-training departments in high schools; also for the association of district schools and for the maintenance of rural high schools. The amount of aid granted should be based on the aggregate daily attendance and the number of teachers employed rather than on the total school population of the county district.

PUBLIC EDUCATION INVOLVES CONTINUALLY GROWING EXPENSES.

The essential characteristic of first-class educational support is stability and growth. A fluctuating income can not bring good results. It is therefore necessary to raise and expend as large an amount of money as the State and counties can afford in order to teach the maximum of efficiency. A study of the expenditures in some of the States with first-class public-school systems shows that these States have been willing to do many times as much as some other States in order to reach their goal. Public education can not be a money-saving process. *The present conditions in this country demand a much larger expenditure than heretofore in order to obtain the needed efficiency of school service.*

Progressive legislation on school taxation should consider the following:

1. The adoption of the county as the unit of local taxation; the funds when collected to be used for general school maintenance and to equalize educational advantages over the county.

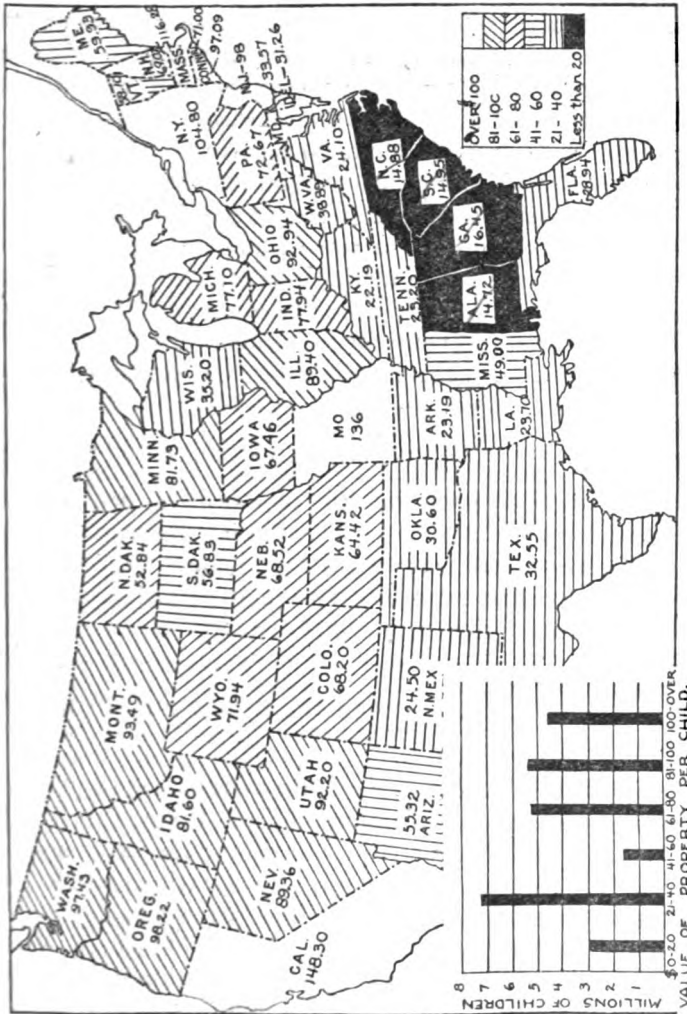
2. The local school community to be authorized to levy taxes or to issue bonds for extraordinary purposes only, such as erecting new buildings and procuring larger sites and school farms.

3. The levying of a State tax equivalent to not less than one-third of the whole school maintenance of the State (including the present permanent school fund).

4. The adoption of a permanent millage tax for the maintenance of the State's higher educational institutions, to be apportioned according to the needs of each institution, to supplant legislative appropriations.

5. The adoption of a new basis for the distribution of the present State permanent fund and future State taxes as follows: (a) *The permanent fund to be distributed on the basis of aggregate daily attendance and the number of teachers employed* instead of, as now usually

done, on the basis of school population, provided that weak schools in sparsely settled sections of the State be given special State aid sufficient to maintain an annual school of at least eight months; (b) *the proposed State taxes to be awarded for consolidation of schools, estab-*



School Property.—Investment for each child 5 to 18 years. 1915-16.

The map shows the investment in school property for each child of school age. The numbers indicate the total property value per school child to be educated. The corner graph indicates in millions the number of children affected, by States in each group.

ishment of rural and other high schools, only when the local school communities have indicated their cooperation by agreeing to certain requirements made by law as a stipulation under which such aid may be received.

VI.—PHYSICAL EDUCATION.

THE WAR'S REVELATION OF THE NEED.

The war has aroused all nations to an appreciation of the value of physical education. Man power is recognized as the most valuable of all national resources. We sent 2,000,000 splendid young men across the seas and we had another 2,000,000 in training when the armistice was signed. These were the very pick and pride of the Nation. But there is another side of the picture. Of the millions of young men who were drafted about 20 per cent were physically unfit for any military service and about 15 per cent more were fit for limited service only; few of those who were accepted were physically well trained; even fewer had been taught to take good physical care of themselves. The defects which made these men unfit for military service are largely preventable; the lack of training and the ignorance of health laws are entirely preventable. A thoroughgoing program of physical education in our schools would prevent or remedy these deficiencies.

PRINCIPLES OF EFFECTIVE STATE LEGISLATION.

Since the beginning of the war in 1914 eight States have enacted physical education laws.¹ Careful study of these laws both on paper and in operation shows that certain principles must be recognized and incorporated into such laws if they are to be effective. The enactment of weak and perfunctory legislation will result in failure and disappointment.²

PRINCIPLES GOVERNING STATE LEGISLATION FOR PHYSICAL EDUCATION.

The enactment of an adequate and effective State law for physical education requires a clear understanding of three things: The objects to be secured through physical education; the processes and accessories necessary for securing these objects; the specific provisions that must be incorporated in the legislative measure.

1. *Objects of physical education.*—Obviously the object of a State law for physical education is to secure the development of the potential physical capacity of the boys and girls of the State; to make them physically, morally, and socially fit for the duties of citizenship and the joy of wholesome living. Quite as obviously, no system of education, however broadly conceived, can do this single-handed. Education is but one of the social agencies involved in the successful upbringing of youth. Good housing, adequate food, and sane regulation of juvenile labor are equally necessary. Without these

¹ Illinois, New York, New Jersey, Rhode Island, California, Nevada, Maryland, and Delaware.

² For fuller information see Recent State Legislation for Physical Education. Bureau of Education, Bulletin, 1918, No. 40. (In press.)

cooperative conditions, any system of physical education can be only partially successful in its appointed task of developing the physical capacity of the youth of the State; but an adequate and effective system of physical education will surely stimulate the development of these other agencies in a State.

2. *Processes and accessories.*—The processes and accessories by which the development of physical capacity are effected may be classified with sufficient accuracy as follows:

(1) Processes—

(a) Sufficient physical activity of the right character to insure development of strength, endurance, agility, and trained control of the muscular powers; and the moral and social qualities of courage, self-control, self-subordination, cooperation, and initiative.

(b) Training into health habits and instruction in health knowledge in order that the individual may know how to take care of his “animal machine” and may reverence it as a servant for high purposes.

(2) Accessories—

(a) Physical examination—the charting, as it were, of each individual’s physical character—repeated at sufficiently frequent intervals to secure a record of growth and physical status.

(b) Provision for correction of deficient bodily conditions that impair health and development.

(c) Adequate space and equipment for exercise appropriate to varying ages and varying physical and mental status of children and youth.

(d) Sanitary school environment, including buildings, grounds, and equipment.

(e) Organization and management of the daily school program and methods of instruction in the interest of health and vigor.

3. *Legislative provision.*—The legislative provision necessary to an effective State system of physical education will include the following:

(1) A clear statement of the purpose and object of the law.

(2) Provision of administrative machinery in the State department of education sufficient for the effective administration of the law. This provision should be broad and flexible. Two things are essential:

(a) State direction and supervision. The best plan is a State director of physical education with the rank of deputy or assistant State superintendent. His powers and duties must not be narrowly defined.

(b) Sufficient financial resources to insure the effective administration of this office, either by specific appropriation or by authorizing the State department to make adequate appropriation for this purpose out of general school funds.

(3) Provision for the continuous physical education of all children and youth of school age (6-18) in the State, as follows:

(a) All children in all grades and departments of the public schools.

(b) All children in institutional and private schools.

(c) All students in normal schools and other schools in which teachers are trained.

(d) All boys and girls of school age in industry. This may be secured by extending the continuation school program so as to make physical education obligatory up to 18; or it may be secured by recognizing and crediting such agencies as municipal playgrounds, Boy Scouts, and Young Men's Christian Association. Attempts at precise definition in the law should be avoided. It should be left as an administrative problem under general authorization.

(4) A minimum time requirement for physical education of one hour each day. It should be explicit that this is the minimum and that school authorities are encouraged to increase the time devoted to play, recreation, and athletics outside the regular school hours. For children in the higher grades and in industry, activities that are approved by the State director of physical education as equivalent to prescribed courses in physical education should be accepted as fulfilling, in whole or in part, the time and quality requirements in physical education.

(5) There should be a carefully drawn provision authorizing and requiring the employment of supervisors and special teachers under specified conditions and in harmony with the administrative organization of the State. A State with a county unit organization would require county supervisors; one with supervisory districts would require district supervisions. City systems would require both supervisors and special teachers—the latter for intermediate and high schools at least. By "specified conditions" is meant that a supervisor should be required for a given unit of school population, the size of the unit to depend upon density of population.

(6) Provision for State aid to county and local authorities in part payment of the salaries of supervisors and special teachers.

(7) Provision requiring the State department of education to fix qualifications of supervisors and special teachers and to issue special licenses for the same.

(8) Provision for adequate physical education in the preparation of all teachers, both for the secondary and the elementary school. The essential requirements of this part of the teacher's education should be prescribed by the State authorities.

(9) Special provision for training regular class teachers already in the service in order that they may do their essential part in the program of physical education.

(10) Provision requiring that pupils be graded in physical education as in other school subjects and exercises and that satisfactory

progress in physical education be a condition to promotion and graduation.

(11) Effective provision for coordinating medical and sanitary supervision of schools with the physical education. Otherwise such essential factors in a complete program of physical education as detection and correction of defects and sanitary conditions of grounds, buildings, and equipment will be neglected. Most States having medical inspection laws will need to revise and extend them. In States having no such laws the enactment of medical inspection and physical education laws should be worked out so as to insure effective coordination. Under medical and sanitary supervision there should certainly be included provision (a) for inspection for detection and control of communicable disease; (b) for periodic examination to discover abnormalities that prevent or retard development; (c) for the employment of school nurses; (d) for school clinics to insure remedying of defects and disabilities (especially dental and eye clinics); and (e) for regular inspection of school buildings, premises, and drinking water to insure sanitary conditions.

(12) If, as in some of the laws already enacted, reference is made to military training, the interrelations should be clearly recognized. A system of physical education worthy the name must include all the essentials of premilitary training: Development of sound physical condition; training in care of one's physical self; training in co-operation; and respect for discipline. Drill in tactics and the manual of arms can not be accepted as a substitute or equivalent for the course in physical education. If military training is authorized in the law, then the State director of physical education should be authorized and required to pass upon the value of any proposed plan of military training and to accept it as a substitute for physical education only in so far as it includes the health, vigor, and endurance-producing features of the physical education program.

VII.—SCHOOL GROUNDS AND BUILDINGS.

Public school grounds, well located, neatly kept, with beautiful and convenient buildings, are the most striking evidence of the intelligence of a community and its interest in education.

Better school conditions invariably mean better schools and better community spirit.

A beautiful and convenient school building costs little more than an unsightly one.

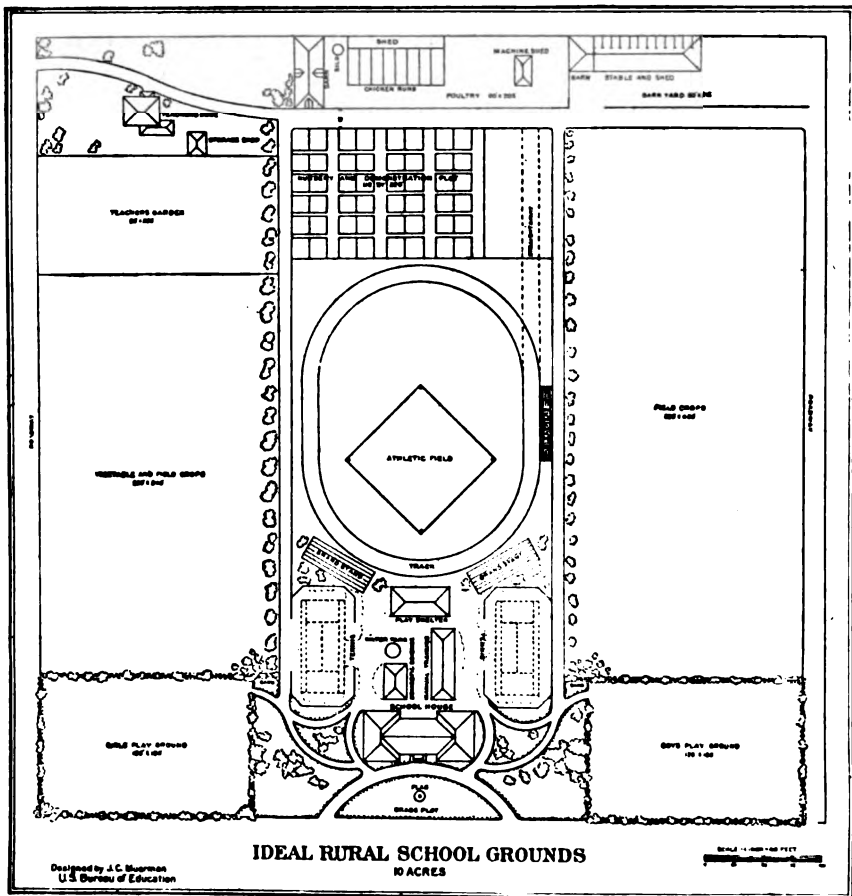
An excellent authority maintains that "a good school is the best asset and the best dividend-paying property in any community."

A State report offers the following significant advice:

As the proper instruction of our boys and girls is the highest and most important function in which the home, the community, and the States unite, the school building

and grounds of every locality should be a concrete expression of its highest ideals, a translation into visible form of the best thought of the best minds, the outgrowth and consummation of all that it can conceive and do for the physical, intellectual, and spiritual needs of its youth.

The delay occasioned by the war in schoolhouse construction has given time and opportunity to study the most modern types of school buildings, to profit by the mistakes already made, and to change existing plans to conform to the highest standards of efficiency.



Ground plan of an ideal rural community school, prepared in miniature by the Bureau of Education for the Panama-Pacific Exposition. Provision is made for housing the teacher and in other ways making the school a real farmers' school.

The order of the chairman of the War Industries Board, issued November 21, 1918, revoked all restrictions placed upon non-war public buildings.

School buildings that were partly constructed and new ones with plans approved and bonds voted and sold may now be completed without further interruption.

PROVISIONS FOR SUITABLE BUILDINGS AND THEIR USE.

During the coming year schoolhouse construction will probably far exceed that of any past year. The scarcity and high cost of building materials, together with the inadequate supply of labor, will soon be adjusted so that the present partly completed school buildings may be ready for occupancy at the opening of the school year 1919.

State aid for rural districts and for high schools maintaining courses in special subjects, such as agriculture, manual training, and domestic science, is common in many States, and the demand is growing. State aid is usually based on a requirement that suitable buildings and equipment be provided by the district. *No State aid should be given a school district unless the school building is in good condition and of sufficient size to provide for the future growth of the school.*

The unit plan of school solves the problem of needed additions to meet State aid requirements. This is a plan for a composite building larger than may be needed immediately, but which provides that the structure may be built in two, three, or four sections at different times.

In some of the States the schoolhouse is used as a polling place. State school laws frequently permit and recommend the use of the schoolhouse as a community center.

School buildings are the property of the people and should be used by them. The following motto has been suggested as a legend to be placed above the door of every schoolhouse:¹ "This building is dedicated to the service of this community and to the common cause of a better life for all."

For community use an assembly room is essential even in a one-teacher school. It is possible to plan the building so that the main room, while in daily use as a classroom, may be adapted to serve as a community auditorium for evening gatherings. This may be accomplished with very little additional expense. *Such plans are now being prepared by the United States Bureau of Education for general distribution.*

In selecting the site for a new school building in rural sections, its use as a community center should receive particular attention. The schoolhouse should be placed at the natural center of the community. Our schoolhouses at present are used for directors' meetings, for farmers' institutes, and gatherings of different descriptions. The war has forced a public use of thousands of school buildings that otherwise would not have been so used. They were utilized for Red Cross work, Liberty Loan drives, and Thrift Stamp campaigns. This is the true community service to which every school building in the land should be dedicated.

PLANS FOR BUILDINGS TO BE PROVIDED BY STATE.

Nine-tenths of the now existing regulations governing schoolhouse construction have been passed by the legislatures of the different States during the past decade.² More than 40 States now have laws on the subject of hygienic features in school architecture.

In four States the boards of health provide sanitary regulations for all school buildings. In five States the boards of health cooperate with the State boards of education and the State architect in preparing

¹ Bulletin, 1914, No. 12.

² Bureau of Education, Bulletin, 1915, No. 21.

school building plans. In 19 States the State boards of education approve the plans for school buildings. In 30 States the approval of school plans or improvements is vested in the State authorities.

SCHOOL PLANS AND SPECIFICATIONS SHOULD BE PREPARED WHOLLY UNDER THE DIRECTION OF COMPETENT STATE AUTHORITY.

So strong is sentiment growing in favor of having plans and specifications of new school buildings, repairs, enlargements, and remodeling of old ones, approved and supervised by competent State authorities that soon every State will have definite laws for governing schoolhouse construction. General satisfaction invariably follows the enactment of such legislation, because it relieves the local school board of all responsibility and saves the cost of a special building inspector. Such plans should include proper heating, lighting, and ventilation for school buildings, and establish uniform standards for the entire State. Ohio and Indiana, among other States, have very complete sanitary regulations provided in the school code.

The following chart shows the status of regulation of schoolhouse construction in the different States.

The legislatures might well consider the following while formulating legislation on school buildings and improvements:

That such laws be enacted as will allow the freest possible use of public school buildings for community center activities, to make the public school buildings true community forums.

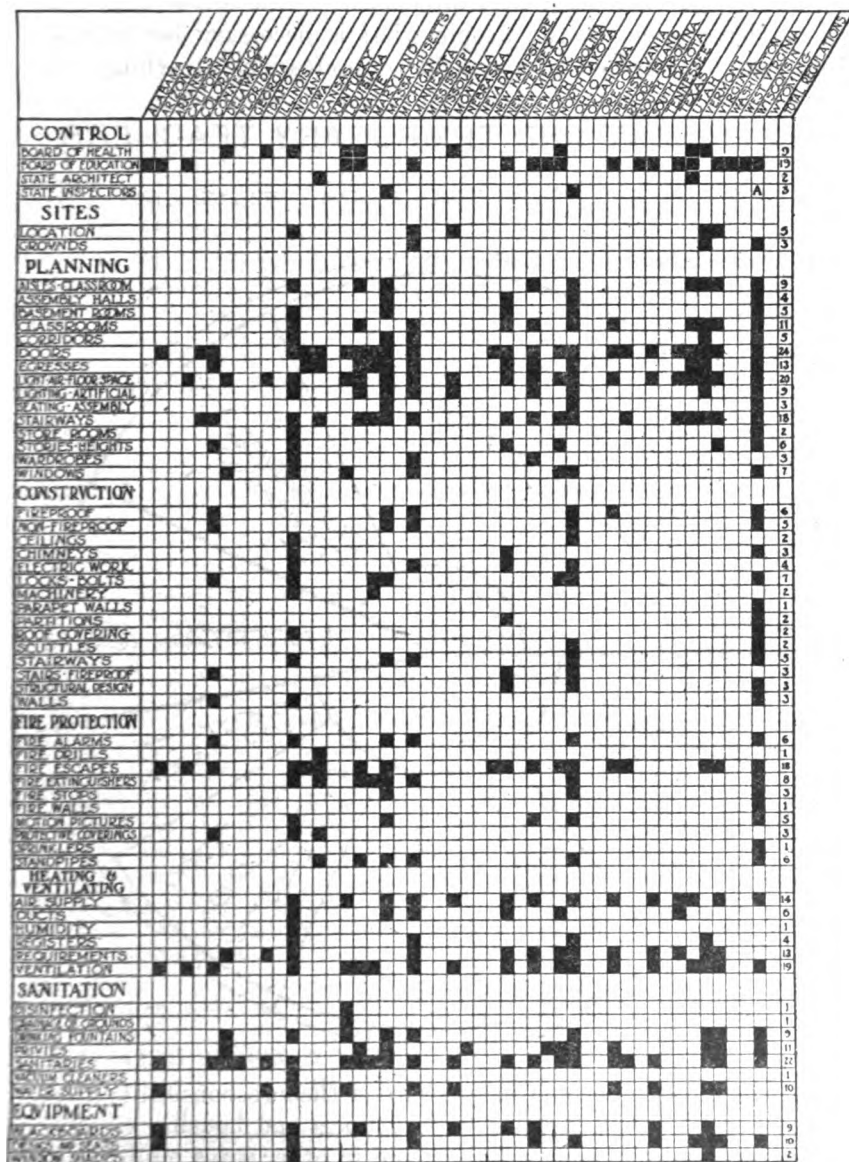
That all plans for school buildings or improvements be approved by the State department of education, acting in cooperation with the State board of health; that a State school architect be selected for this work, and that the power of condemnation of school buildings and grounds be in the hands of competent State authority; that the selection of all school sites and the location of the school buildings on these sites be also approved by the State board of education or by some competent authority selected by this board.

That where no constitutional limitation is placed upon the rate of taxation, the legislature enact such laws as will allow the people of every district freedom in voting a rate of taxation that will provide the needed support of their public schools, to include new schoolhouse construction and necessary improvements.

That no State aid should be given any district which has not made full provision for the care and protection of the school grounds and school buildings; that State aid for weaker districts be given to those who comply with the rules and regulations of the State department only.

CHART SHOWING STATUS OF REGULATION OF SCHOOLHOUSE CONSTRUCTION IN THE UNITED STATES IN THE YEAR 1915

COMPILED BY FRANK IRVING COOPER, ARCHITECT BOSTON.



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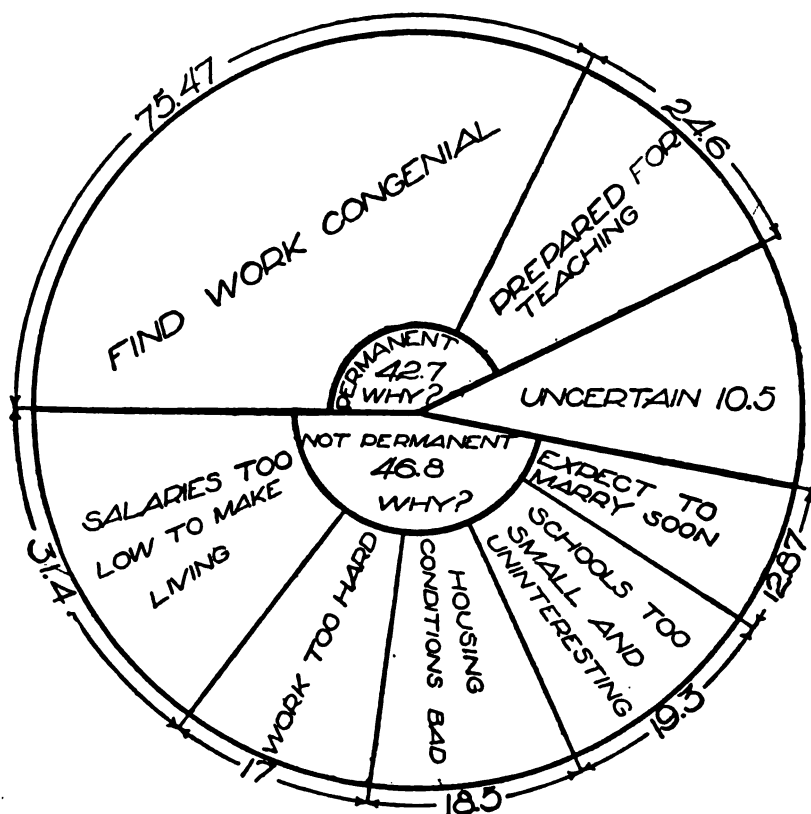
■ INDICATES REGULATION
IN FORCE.

VIII.—PREPARATION OF TEACHERS.

Even before the war, the most difficult phase of the whole educational problem was how to get and retain a sufficient number of well-prepared teachers. Since the country's entrance into the war, the problem has become greatly intensified. Now is the time, therefore, to drive home to the people what is necessary before better things can be attained in the field of professional teaching. The

PERMANENT AND TEMPORARY TEACHERS

ANSWERS FROM 3941 RURAL TEACHERS



people will have to become fully aware of their responsibility toward the teacher; they will have to make schools and housing conditions more attractive than they now are; and in other ways make possible long well-paid tenures in the same community.

The several legislatures should, by legal enactment, safeguard the profession and offer special inducements to all teachers to equip

themselves well for teaching as a life work. On this basis, the teachers will be more ready than now to do their share to attain real professional standards of teaching.

Conditions are particularly bad in the rural schools. The bureau estimate for past years places the annual number of new rural teachers at about 87,500. The proportion of beginning teachers for the current year is abnormally large. In some counties as high as 85 per cent of the teachers have had no previous experience. It appears that at least 125,000 inexperienced teachers are employed in rural communities this year. In addition to this, the rural schools are losing most of their men teachers because the salaries paid are not sufficient for the support of a man and his family.

The graphic representation given on the preceding page gives the situation from the teachers' point of view. It is the result of a Bureau of Education study of all the rural teachers in South Dakota; 42.7 per cent of the teachers are permanently in the schools; 10.5 per cent are uncertain as to whether or not they will remain permanently in the profession; and 46.8 per cent do not intend to make teaching their life profession. The reasons reported why these teachers do not intend to remain permanently in the schools should be cause for serious consideration by legislatures as they tell the story of rural teachers for every State in the Union.

REASONABLE STANDARDS FOR TEACHER PREPARATION.

Adequate legislation on the basis of the comprehensive plan outlined below will unquestionably provide the State with a high-grade professional teaching-staff:

1. Improve teaching conditions by—
 - (a) Establishing reasonable minimum salaries for all teachers.
 - (b) Scaling all teacher's salaries to the grade of certificate held, thus placing a premium on special preparation.
2. Require higher teaching qualifications by—
 - (a) Increasing, gradually, the entrance requirements of the State normal schools and lengthening their study courses.
 - (b) Discontinuing the issue of certificates on examination as soon as the normal schools and other teacher-training institutions have become fully equipped to supply all the professional teachers required.
 - (c) Placing the minimum requirement for permission to teach at graduation from an accredited four-year high school, or its equivalent, and in addition at least one year's professional study acquired at a professional school for teachers. The standard not to go into effect before ample time (1 to 4 years) is given for all teachers in the service to attain these requirements.
3. Increase the supply of professional teachers by—
 - (a) Granting State bonuses to teachers as rewards for long service in a single school community.
 - (b) Establishing a retirement fund for teachers.

RADICAL STEPS REQUIRED TO PROVIDE THE NECESSARY SUPPLY OF RURAL TEACHERS.

The Nation needs immediately many thousand specifically prepared teachers for the new consolidated and other rural schools, in order to make these schools real farm community schools. This may be accomplished by establishing, through legislative enactment,

teacher-training departments in all the higher educational institutions in the State which can at all adapt their work to this end. This would usually include:

1. State normal schools—in specifically organized departments.
2. Schools of education in universities and colleges—in special courses for special rural school administration and supervision.
3. Agricultural colleges—in specific departments or courses for special subject teachers and supervisors, and principals of large rural schools of agricultural type.
4. Fully accredited high schools—in fifth year course teacher-training departments.
5. Extension service for teachers in service—to aid them to meet the increased academic and professional standards contemplated above.

IX.—CERTIFICATION OF TEACHERS.

From the very early times in our educational history, whenever any formal recognition of the school was taken, or support given to them by civil authorities, it has been the custom to require of the teacher some sort of certificate of proficiency. Early requirements were very meager and generally of a religious or moral nature rather than of an academic nature, though as early as 1789 in Massachusetts graduation from college or university was recognized as sufficient guarantee of ability to teach. These early customs, however inadequate, established a precedent; for all State systems of schools when effected legalized the idea of exacting some standard of attainment from applicants to teach.

The power of certifying teachers was vested by the early laws, sometimes in the State, as in New York; sometimes in the county, as in Missouri and Indiana; sometimes exclusively in the local authorities, as in Massachusetts, and sometimes in all of them. County authorities, however, were the most convenient and popular for the purpose and the majority of the States vested some or all of the certifying power in them. Later, State departments of education assumed new importance and prestige, and educational powers were granted to State superintendents. Higher efficiency and unified requirements were secured under these new conditions by including among the legal duties of the State superintendent that of granting certificates of State-wide validity.

CENTRALIZING TEACHER CERTIFICATION IN THE STATE DEPARTMENTS OF EDUCATION.

State and county certification prevailed in the majority of States almost from the establishment of their State school systems. In 1887 42 of the 48 States and Territories issued certificates from both of these sources. Four States issued county or local certificates only.

Two States had so centralized the certifying authority that all certificates were issued from the State department.

By 1903 the number of States having the centralized State certifying system had increased to 8. Four still issued county certificates only, and in the remaining 36 both States and county certificates or local certificates, as in Louisiana and Maine, were issued.

By 1911 25 States, or 30 per cent of the total number had adopted the centralized system of issuing certificates from the State only, and by 1918 50 per cent had accomplished complete centralization.

As additional evidence of centralizing tendencies in the matter of certification, it may be added that of the States which still grant certifying authority to counties, much of the responsibility of that privilege such as giving out and examining questions is assumed by the State department. This tendency is on the increase. In 1911, of those States in which county certification prevailed, 8 per cent retained in the State department the power of giving questions and examining papers. In 1918 93 per cent of the county certifying States retained the papers grading authority in the State department.

REQUIREMENTS FOR CERTIFICATION.

The early indefinite requirements, such as "evidence satisfactory to the examining power" (either local or State authorities) passed into more definite ones, and subjects for examination were enumerated in the law. Reasonably typical of these was the law of Indiana, which required that teachers should be examined "touching their qualifications, and particularly with respect to their knowledge of the English language, writing, and arithmetic." Additional subjects were added from time to time. The custom was early established of grading certificates according to the standing of applicants and of making the duration dependent upon the grade.

In the meantime professional preparation for teaching was becoming more and more common since the establishment of the first normal school in 1839, and demands were increasing that certificates without examination be given to graduates of professional schools. By 1873 the discussion of the professional license had become quite general and various States recognized the demands. By 1890, 25 States had added to the branches in which teachers were examined—one or more professional subjects, usually theory and practice of teaching, or mental philosophy, or didactics. According to the report of the Commissioner of Education for 1897, 28 recognized graduation from normal schools or universities as evidence of qualification for certification without examination. By 1903 the number of these States had increased to 31. During the period from 1911 to 1918 the percentage of States which recognized professional training as a basis for certification increased from 56 to 100 per cent. In 1903, 41 States of the 48 States or Territories included professional subjects in the examining list. This recognition of the efficacy of some form of professional training or examination in professional subjects as controlling factors in judging teaching ability is rapidly gaining a permanent foothold in school legislation throughout the country. All States now include professional subjects in teachers' examinations and the questions of this nature are constantly increasing in number and difficulty.

However, the fact that mere recognition is given does not show the full force of the growth of the demand for professional training on the part of applicants to teach. *A concerted and almost universal*

movement is now on foot to increase both academic and professional requirements for certification. This is shown by the fact that several States not only recognize graduation from a professional school as *one* means, but as the *only* means of preparation for teaching. These States are now requiring graduation from a full four-year high school, usually one which includes professional subjects in its curriculum; or a minimum amount of professional training, or both, as a prerequisite for any kind of certificate. In 1911 Indiana established this precedent, and at the present time 27 per cent of the States in the Union make such requirement.

SPECIALIZATION A REQUISITE FOR CERTIFICATION.

The teaching profession should be specialized at least as highly as other learned and technical professions. Such a plan involves no new idea, but simply carrying to its logical conclusion that already involved in the certification plans of practically all States at the present time and shown in the differentiation of certificates, as high-school, kindergarten, special-subjects certificates. The educational world now recognizes that a marked distinction is necessary in the preparation of candidates for rural school certificates, special vocational certificates, and the like.

The next step in legislation should demand (1) a certain amount of professional training in addition to high-school graduation as a prerequisite for all certificates; and (2) a higher degree of specialization in preparation—manifested on the face of the certificate.

PLAN OF CERTIFICATION.

A few States have adopted the horizontal as distinguished from the vertical plan of certification. This plan involves two grades of certificates, first and second, for high schools, two for elementary schools, two for primary and kindergarten, and two for special subjects, rather than general certificates of two or three grades recognized in all schools of all grades. The plan of certification should be the horizontal one, with special certificates of two grades for at least the following: High school, rural and city; elementary schools, rural and city; primary and kindergarten school certificates, and certificates in special subjects such as music, drawing, and art.

About one-third of the States require some professional training as a prerequisite for all, or nearly all, of the certificates granted. The Maryland law, e. g., permits the issue of one grade of certificate, the third, without professional training, but third-grade certificates are accepted only when the supply of higher-certificate teachers is exhausted. Another indication of the growing importance of professional training is offered by the fact that since 1911 the number of States granting renewals of certificates on the basis of some sort of professional training has increased from 18 to 40 per cent.

The most marked, and probably the most important tendencies of certification provisions of the last few years are (1) that toward making a certain minimum of academic and professional training prerequisite for any certificate, and (2) that of approximating State-wide unity of requirement by concentrating the certifying power in the State department. The latter is now practically accomplished.

The time has long since passed when the American public can afford to intrust the education of its children to the uneducated and untrained as it has done in the past. The State has the power to raise the standard of qualification for teachers through legal enactments concerning certification. Investigations made by the Bureau of Education in several States show that from 30 to 40 per cent of the teachers holding legal certificates at the time of making the surveys were untrained.

No man of prominence has emphasized the value of professional preparation with better logic than the late J. Sterling Morton:

We demand educated educators. We demand professionally trained teachers, men and women of irreproachable character and well tested abilities. We demand from our legislature laws raising the standard of the profession and exalting the office of the teacher. As the doctor of medicine or the practitioner at law is only admitted within the pale of his calling upon the production of his parchment or certificates, so the applicant for the position of instructor in our primary and other schools should be required by law to first produce his diploma, his authority to teach, from the normal schools.

We call no uneducated quack or charlatan to perform surgery upon the bodies of our children lest they may be deformed, crippled, and maimed physically all their lives. Let us take equal care that we entrust the development of the mental faculties to skilled instructors of magnanimous character that the mentalities of our children may not be mutilated, deformed, and crippled to halt and limp through all the centuries of their never-ending lives. The deformed body will die and be forever put out of sight under the ground, but a mind made monstrous by bad teaching dies not, but stalks forever among the ages, an immortal mockery of the divine image.

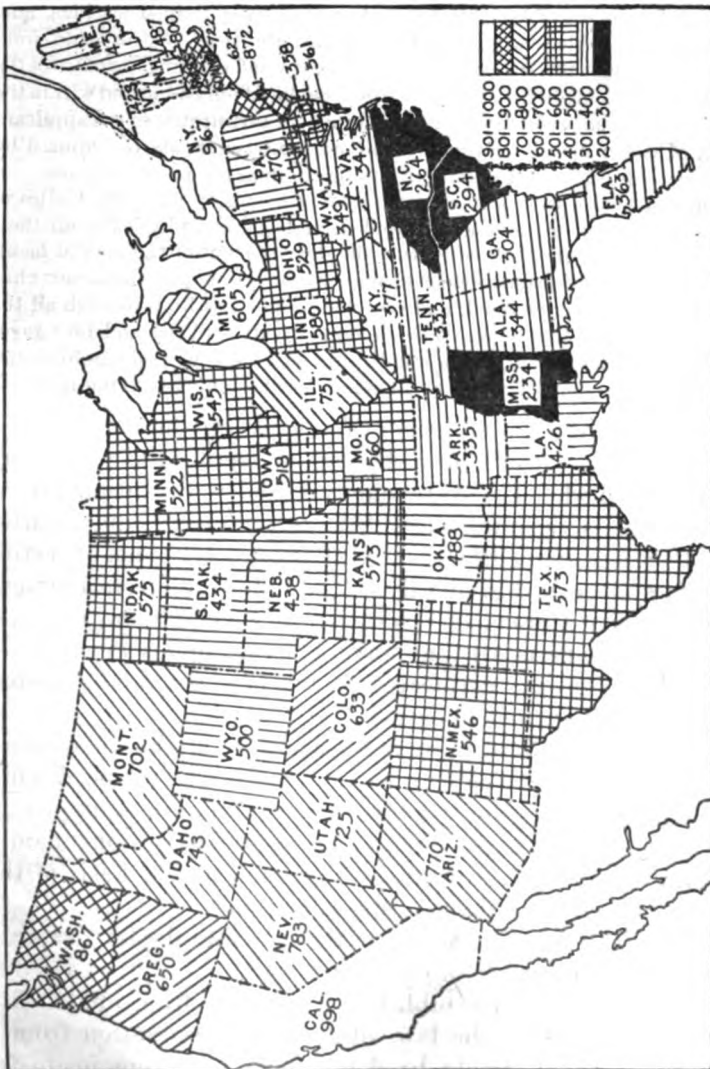
It is recognized that the adoption of suggestions herein outlined would in some States result in a shortage of applicants possessing qualifications specified. To overcome this a slow evolution rather than a revolution is recommended. While standards and salaries both should be raised immediately, the full professional idea of certification may be approached gradually. The following are recommendations made by the Bureau of Education in various State surveys. While made for specific cases they have general application:

1. The power to grant certificates to teachers should be vested in the State department of education.
2. The State should establish by law reasonable minimum salaries.
3. The issuance of certificates on examination should be discontinued as soon as the teacher-training institutions are equipped to supply the teachers required. Courses in these institutions should be more highly specialized. Certificates granted on the basis of the training given should indicate this specialization.
4. Certificates should be based on the horizontal plan; salaries should be scaled to the grade of certificate held.
5. The legislature should establish a fixed date from one to five years after the passage of the law, after which graduation from a standard normal school should be demanded as a prerequisite for

any certificate. While such an arrangement may seem to be inexpedient because of the difficulty to secure teachers, States which have by legislation established such standards find that the supply of teachers rises to the demand after a few years.

X.—TEACHERS' SALARIES, TENURE, AND RETIREMENT PENSIONS.

Salaries of teachers are so low that they offer neither incentive to professional preparation, nor encouragement to long tenure. Moreover, the new and more lucrative opportunities which the war has made available to teachers have made serious inroads on the profession. It can not now be expected that qualified persons will



AVERAGE ANNUAL SALARY OF TEACHERS. 1915-16.

The map gives the range by States of annual salary for all teachers. The average ranges from \$24 in the lowest State to \$998 in the highest. These salaries are too low to attract any large number of well-prepared men and women to the profession and to keep them there permanently.

continue to teach, or that capable ones will prepare for teaching, unless radical and sweeping changes are forthcoming in the salary scale. The cost of living has increased since 1913 as follows:

Food.....	85 per cent.
Clothing.....	106 per cent.
Drugs.....	103 per cent.
Fuel.....	53 per cent.
House furnishing goods.....	75 per cent.

Teachers' salaries have not increased in a proportionate ratio. Recent data collected by the Bureau of Education indicate that a liberal estimate for the country at large is 12 per cent. The inadequacy of compensation at the present time is indicated by comparisons of teachers' salaries with those paid in the industries. (See Tables 3, 4, and 5.)

Legislative plans which provide for different grades of certificates should recognize the necessity of scaling the salaries according to the grades—placing a premium on special preparation. Such a plan is now followed in Indiana. This, of course, should be in addition to a higher minimum than now exists in the general salary scale.

TABLE 3.—*Salaries paid in the industries (taken from the Cleveland education survey made in 1915).*

	Cleveland.	Boston.	Chicago.	Minneapolis.	San Francisco.
Plumbers.....	\$1,219	\$1,320	\$1,394	\$1,044	\$1,540
Bricklayers.....	1,192	1,244	1,293	1,197	1,390
Painters.....	1,132	1,201	1,326	1,201	1,309
Painters.....	1,093	957	1,232	921	1,061
Carpenters.....	992	1,028	1,139	1,030	964
Molders.....	945	980	942	927	1,126
Machinists.....	875	1,074	884	958	944
Teachers.....	791	1,001	1,034	937	1,124

TABLE 4.—*Salaries paid in the navy yards.¹*

Trade.	Annual salary.
Blacksmiths.....	\$2,396.16
Radio electricians.....	2,321.28
Masons, stone and brick.....	2,146.56
Carpenters.....	2,059.20
Welders.....	2,046.72
Plasterers and plumbers.....	1,996.80
Electricians.....	1,996.80
Canvas workers.....	1,896.96
Mechanics.....	1,722.24
Upholsterers.....	1,697.28
Chauffeurs.....	1,372.80
Gardeners.....	1,297.92
Common laborers.....	{ 1,297.99
	{ 1,148.16
Sewers.....	1,148.16
Charwomen.....	873.60
Teachers ²	630.64

¹ Data furnished by the United States Navy Department.

² Salary of teachers used for comparison is the average annual salary of all teachers—urban and rural—based on data gathered in 1915 by the Bureau of Education.

TABLE 5.—*Teachers' wages—Length of school term in months—Number of schoolhouses—Value of school property—All for 1915-16.*

States.	Average monthly salary of teachers.			Average length of school year, in months.	Average annual salary of all teachers.
	Men.	Women.	All.		
1	2	3	4	5	6
Continental United States.....	\$85.36	\$86.88	\$70.21	8.02	\$563.08
North Atlantic Division.....	107.96	75.90	80.15	9.09	728.56
North Central Division.....	84.82	64.97	68.14	8.36	599.65
South Atlantic Division.....	67.90	46.40	50.65	6.76	342.39
South Central Division.....	70.56	57.02	61.18	6.76	413.58
Western Division.....	117.13	88.59	95.05	8.39	797.47
North Atlantic Division:					
Maine.....	83.26	49.55	53.38	8.06	430.24
New Hampshire.....	116.39	51.05	56.74	8.58	486.80
Vermont.....	90.39	44.84	48.31	8.75	422.72
Massachusetts.....	.....	.....	58.03	9.09	800.18
Rhode Island.....	142.03	68.00	74.27	9.72	721.91
Connecticut.....	127.03	64.16	68.16	9.16	624.35
New York.....	.....	.....	101.70	9.51	967.20
New Jersey.....	.....	.....	95.34	* 9.15	872.34
Pennsylvania.....	68.63	50.55	54.42	8.64	470.18
North Central Division:					
Ohio.....	68.73	57.55	60.31	8.77	528.88
Indiana.....	.....	.....	74.88	7.75	680.32
Illinois.....	106.24	88.18	91.57	8.20	750.85
Michigan.....	.....	.....	70.40	* 8.60	605.47
Wisconsin.....	.....	.....	62.72	8.09	545.00
Minnesota.....	98.45	57.69	62.16	8.39	521.52
Iowa.....	90.69	57.40	60.90	8.50	517.65
Missouri.....	75.65	67.12	69.19	8.09	559.74
North Dakota (1915).....	75.00	57.20	60.12	8.63	574.76
South Dakota.....	.....	.....	51.03	8.50	433.71
Nebraska.....	73.21	50.94	53.60	8.18	438.45
Kansas.....	83.89	66.76	69.91	8.19	—2.60
South Atlantic Division:					
Delaware.....	\$57.06	\$42.37	\$44.79	8.54	\$358.31
Maryland.....	.....	.....	63.04	8.90	561.06
District of Columbia.....	.....	.....	112.34	8.90	999.84
Virginia.....	66.07	45.06	48.50	7.05	341.90
West Virginia.....	.....	.....	51.69	6.75	348.93
North Carolina.....	.....	.....	42.57	6.21	264.36
South Carolina.....	70.54	49.89	54.14	5.43	293.99
Georgia.....	65.23	39.25	44.49	6.84	304.31
Florida.....	69.96	51.50	55.86	6.50	363.09
South Central Division:					
Kentucky.....	.....	.....	52.33	7.20	376.75
Tennessee.....	.....	.....	53.72	6.19	332.52
Alabama.....	.....	.....	50.96	6.75	344.00
Mississippi (1913).....	.....	.....	37.99	6.15	233.64
Louisiana.....	84.37	57.75	63.10	6.75	425.96
Texas.....	97.28	78.87	84.82	6.75	572.52
Arkansas (1915).....	.....	.....	49.62	6.75	334.94
Oklahoma.....	75.90	59.34	64.27	7.60	488.45
Western Division:					
Montana.....	98.18	76.98	79.46	8.84	702.43
Wyoming.....	85.91	61.91	65.41	7.65	500.39
Colorado.....	85.93	65.65	75.79	8.35	632.85
New Mexico.....	79.24	74.47	76.88	7.13	546.03
Arizona.....	119.35	90.65	96.30	8.00	770.40
Utah.....	108.90	80.69	88.95	8.15	724.92
Nevada.....	133.41	87.55	94.32	8.30	782.86
Idaho.....	112.38	79.31	95.85	* 7.75	742.81
Washington.....	.....	.....	99.26	8.73	866.58
Oregon.....	.....	.....	86.15	7.55	650.41
California.....	151.63	106.71	113.46	8.80	998.45
Outlying possessions:					
Alaska.....	.....	.....	95.02	9.20	874.26
Hawaii.....	95.89	94.84	93.94	8.60	807.87
Panama Canal Zone.....	99.61	101.87	.....	.....	.....
Philippine Islands.....	.....	.....	* 13.26	.....	.....
Porto Rico.....	54.43	53.26	53.71	8.10	435.06

* Statistics of 1914-15.

† Estimated for States not reporting salaries of men and women separately.

‡ Exclusive of Wilmington.

§ Filipino teachers only. Average monthly salary of 506 American teachers, \$115.54.

SCHOOL TENURE.

It is also important that some recognition be given to tenure of office. This is especially necessary outside of cities. Schools taught by itinerant teachers must of necessity be inefficient. A salary bonus provided by State funds for tenure in the same school or district would add stability and dignity to teaching in rural communities. Indiana, Wisconsin, and Maryland have made a beginning in this direction by offering a bonus to those remaining more than one year in the same school.

TEACHERS' RETIREMENT PENSIONS.¹

Teachers' pension systems are part of a recent movement for social insurance. Pensions of some kind have been in existence since the Roman Era. They were granted first as rewards for conspicuous bravery, or for military or naval service, or for distinguished contributions in the field of literature, art, or science. As the administrative departments of government developed, they also introduced pensions, and the practice spread to industry and commerce. Society has come to demand that an employee who has given the services of a lifetime to an employer be provided for in his old age. Social justice demands that this protection be more definite and dignified than that of common charity. The justification of pensions rests not only on their service in cases of distress, but also on the extent to which they may improve the conditions of service, increase the efficiency of workers, and promote social welfare generally. Any service becomes impaired as a result of the waste and demoralization caused by the retention of employees who are inefficient because of old age or disability. Their retention discourages younger and abler persons, and clogs the avenues of promotion.

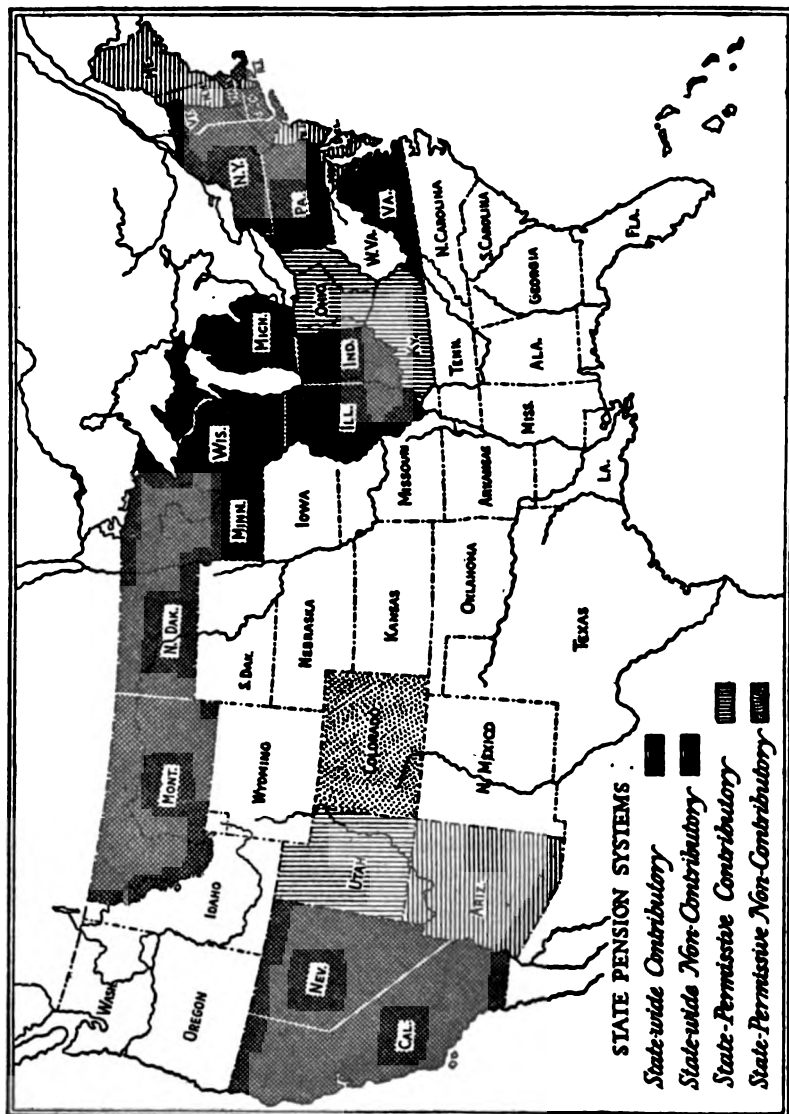
A study of 67 pension plans for teachers in the United States, representing 25 States and 64 counties and cities, shows that the movement for such pensions is recent, but wide spread and still extending. Generally the systems are administered by special boards, of which the teachers constitute a majority. Provision is, as a rule, made for retirement on the basis of service and disability, but usually only for teachers entering the service after the establishment of the system. Funds are in most cases provided by teachers' contributions and by public appropriation in approximately equal amounts, but the funds arranged for are frequently insufficient to pay the pensions that have been promised.

The first system of teacher pensions to be established in the United States is that of Chicago, which was inaugurated in 1893. Before 1900 seven other systems had been founded. Before 1910 there were 23 more. More than one-half of all systems (36), however, have come into existence since the beginning of 1910. There are now State-wide pension systems for teachers in 21 States, permissive systems in 4

¹ Information and graphic map taken from report of the National Education Association, Committee on Salaries, Pensions, and Tenure.

others, and the local system in 9 more. Thus 34 States are represented in the movement.

The existing pension systems are sometimes administered by the superintendent or commissioner of education, sometimes by the board of education, but in nearly four-fifths of the systems there is a special pension board or commission or committee.



These boards have from 3 to 11 members. Two-thirds of them have 5 or 7. Forty-nine out of 51 boards reporting include representatives of the teachers, who are generally elected by the teachers themselves.

In nine-tenths of the systems membership is compulsory for new teachers. In all the systems retirement is on the basis of from 20 to 40 years of service, most frequently 30 years. About one-half of the systems make provision also for retirement

on the basis of age, at from 50 to 75 years—most frequently 60 years for both men and women. Nearly six-sevenths of the systems have provisions for disability—usually a proportion of the full pension equal to the proportion of the full years of service completed before retirement.

Teachers contribute to the fund in about six-sevenths of the systems, most frequently 1 or 2 per cent of their salaries. In about six-sevenths of the systems public funds are supplied also from individual sources, school or special taxes, deductions from teachers' pay, or from direct appropriations. The public contribution is not related to that of the teachers in as many systems as would be expected. Where it is so related it most frequently equals the contribution of the teachers.

Return of the teachers' contributions in case of resignation is provided for in about one-half of the systems, the refund being most frequently one-half of the contribution without interest. Return in case of dismissal is provided in about one-half the systems, this refund nearly always being all of the contribution without interest. Return in case of death is provided in about one-third of the systems.

The financial experience of these systems is as yet brief. The representative salary of the teachers in the 63 systems reported is \$730 a year. The representative pension is \$500 a year. The representative total contribution on the part of the teachers is \$510, a frequent requirement being a sum equal to the first year's annuity. The prevailing tendency is toward the establishment of State, rather than local, systems. Certainly the State has advantages unapproachable by any local or private establishment.

The provisions governing the different systems are varied. They show uniformity only as State wide or permissive, and contributory or noncontributory. Unfortunately, many of the existing systems have been organized without serious attempts to insure security for the future by the employment of any sound and scientific basis. The result has been insolvency at the period when help is most needed by those who have depended upon the system. In order that funds may be provided and administered in the most economical way, with justice to the beneficiaries and fairness to the public, and in order to promote the efficiency of the educational system, careful study should be given to the fundamental principles involved in successful pension systems. These have been worked out scientifically and authoritatively by actuarial experts.

Certain recommendations concerning the necessary provisions of pension systems are given below. They are summarized from a report of the committee on salaries, pensions, and tenure of the National Education Association. They are embodied in a suggested system for the State of Vermont, but can easily be adjusted to conditions in any other State.

THE RETIREMENT BOARD.

The pension system is administered by a board. A small one is most effective to secure centralized responsibility and administrative efficiency. The State and teachers are both represented; the former by the executive officers who have charge of funds and insurance, the latter by elected representatives with terms of at least three years.

Tenure of service should overlap, to give continuity of policy and knowledge of details on the part of a majority of members. The functions of the board are to frame by-laws and regulations to carry out the provisions of the act and to supervise, subject to expert advice, the maintenance of the funds. The services of a consulting actuary should be retained in large systems, or an actuarial investigation every three years provided for in small ones.

MEMBERSHIP.

Membership should be compulsory for all new teachers, optional for those already in the service within a stated period of time, probably one year. This is necessary in order that the fundamental benefits on which the necessity for a pension is based may be accomplished. It is no hardship to any, because those entering the service do so knowing the conditions of appointment.

RETIREMENT PLAN.

Retirement of teachers should be provided for on the combined basis of age and service. When provided on the basis of service alone, there is danger of instability because of over expensiveness. The principle is also opposed to the interests of society, since teachers may retire at the time of their greatest efficiency. Retirement on the basis of age alone is inequitable, since the employer's contributions to the fund are made in recognition of service rendered. Retirement ages recommended are 60 or 65 for voluntary, and 70 for compulsory retirement. The amount of service should be from 20 to 30 years.

RETIREMENT ALLOWANCE.

The amount of the retirement allowance for future teachers and those below the age of 45 who are in service at the time of the introduction of the pension plan will be determined by the amount contributed annually by and on behalf of such teachers; by the rate of interest earned or guaranteed; and by the rates of mortality. The retirement allowance will be the annual sum that can be purchased by the accumulations standing to a teacher's credit at the time of retirement. These sums can be predicted with scientific accuracy by the actuaries, so that teachers may know how much to expect from given contributions. Complications arising from systems which base the retirement allowance on the salary received at the time of retirement, or on the average salary for a few years preceding retirement, or by the payment of a flat rate, or by calculating on the basis of service, should be avoided. To enable teachers to make such arrangements as suit their circumstances, the plan gives the opportunity of increasing their contributions as their salaries increase. They have the selection of one of three options at the time of their retirement: (1) Annuity covering the life of the annuitant; (2) annuity, guaranteeing also the return of contributions remaining after death; (3) annuity for life, followed by life pension for the widow.

Disability allowance.—The beneficiary may also retire on a basis of disability, after a certain minimum number of years of service, the annuity being based on the sums accumulated with the addition of annual payments from the State, sufficient to make the total annual pension one-half the average annual salary during active service.

CONTRIBUTIONS.

The pension fund is made up by the contribution of equal amounts from the teachers and the State, on the reserve plan. The teacher pays a stated amount, say 5 per cent of her salary; the State contributes the same, and both sums are placed at interest and to the credit of the particular teacher's fund. At retirement, the amount of the annuity is equal to about one-half the average annual salary of the annuitant, and the percentage of salary collected must be large enough to insure this as a minimum. For teachers who have been in active service for some years before the introduction of the pension plan, a different arrangement is necessary. They should contribute annually the same percentage of their salaries as other teachers in service; the State should pay annually on their account, in addition to the ordinary duplication of the teachers' contributions, such sums as, with the other accumulations, will provide an annuity on the same basis as that provided for the other teachers, namely, about one-half the average annual salary. The additional sums furnished by the State for this purpose decreases rapidly, and ultimately disappear entirely.

ACCUMULATIONS.

It is desirable to follow the principle observed in savings and insurance systems, that contributions of both teachers and the State be kept in individual accounts, credited to each teacher up to the time of retirement. It is advisable for the State to guarantee interest at 4 per cent; any sums earned above this may be placed in a reserve fund and employed to reduce appropriations in any one year.

Return of contributions.—A scientifically planned system will return not only the teacher's contributions, but after a definite period of service probably that necessary to qualify for permanent appointment, those placed to his credit by the State. The total return may be the amount to his credit with interest at 3½ instead of 4 per cent; the difference in the rate for withdrawal and the rate for retirement being considered as some return for the protection offered. It may be used to pay for the cost of administration.

Systems should be inaugurated with the advice and help of actuaries, and their soundness maintained by periodical investigations. Some provision should be made for changes in existing rules from time to time, as desirable, to provide for future contingencies. Changes in existing contracts can be made only with the consent of those concerned.

XL.—SCHOOL TEXTBOOKS.

The United States Commissioner of Education places the following estimate upon the importance of school textbooks:

In the elementary and secondary schools of the United States textbooks play a more important part than in similar schools of most other countries. In almost all subjects teachers and pupils depend on textbooks both for facts and for order of presentation. Few teachers correct errors in statements of facts; fewer still attempt to improve or are able to improve faulty arrangement of material or illogical or unpedagogical development of subjects treated. Lessons are assigned, learned, and recited in the order given in the books. The adoption of textbooks for use in any school or system of schools, therefore, determines in large degree the courses of study. Of the three factors in every school—building and equipment, teachers, and textbooks—it can hardly be said that textbooks constitute the factor of least importance. Frequently the textbook is the teacher, while the man or woman called the teacher is only a kind of taskmaster or policeman driving the children through the pages of the textbook. This especially is true of a large number of one-room country schools in which the teachers "hear the lessons" of from 25 to 35 classes a day, giving from 5 to 10 or 15 minutes to each lesson. It is therefore a matter of great importance that the best possible textbooks on all subjects of school study be put into the hands of teachers and children, and the methods by which this is attempted in the several States, cities, and individual schools must have interest for all school officers.

The Nation has no uniform system for the publication and adoption of school textbooks.

Two States, California and Kansas, print their own textbooks. Twenty-five States have State-wide, uniform system of adoption; five have county adoption; the rest resort to local adoptions by the districts, towns, or townships.

Eleven of the 25 States having State-wide adoptions permit the State boards of education to make the selection of textbooks; the

remaining 14 have special textbook commissions appointed by the governor.

The tendency to give the State board of education power to select textbooks seems to be gaining in favor.

The boards or commissions in 14 States require all competing book companies to submit samples of textbooks to the State superintendent of public instruction with cost of each and to give suitable bonds for the fulfillment of any contract awarded them. They must comply with all rules governing the distribution and sale of books, either from specially selected depositories or direct from the State superintendent's office, or from the office of the publishers upon orders approved by the State department of public instruction.

Exchange of old books is often provided at a fixed sum. Some States allow dealers the privilege of selling the adopted books at a price not over 10 or 15 per cent above the actual cost of production.

QUESTION OF STATE UNIFORMITY OF TEXTBOOKS.

State uniformity has proved cheaper than separate adoptions by the several districts. State contracts frequently provide that adopted textbooks shall not be sold elsewhere at a lower price.

Textbook publishers can generally afford to make lower prices when they have the contract for an entire State. Local dealers, because of high freight rates, etc., frequently charge higher prices than they would under a fixed contract price.

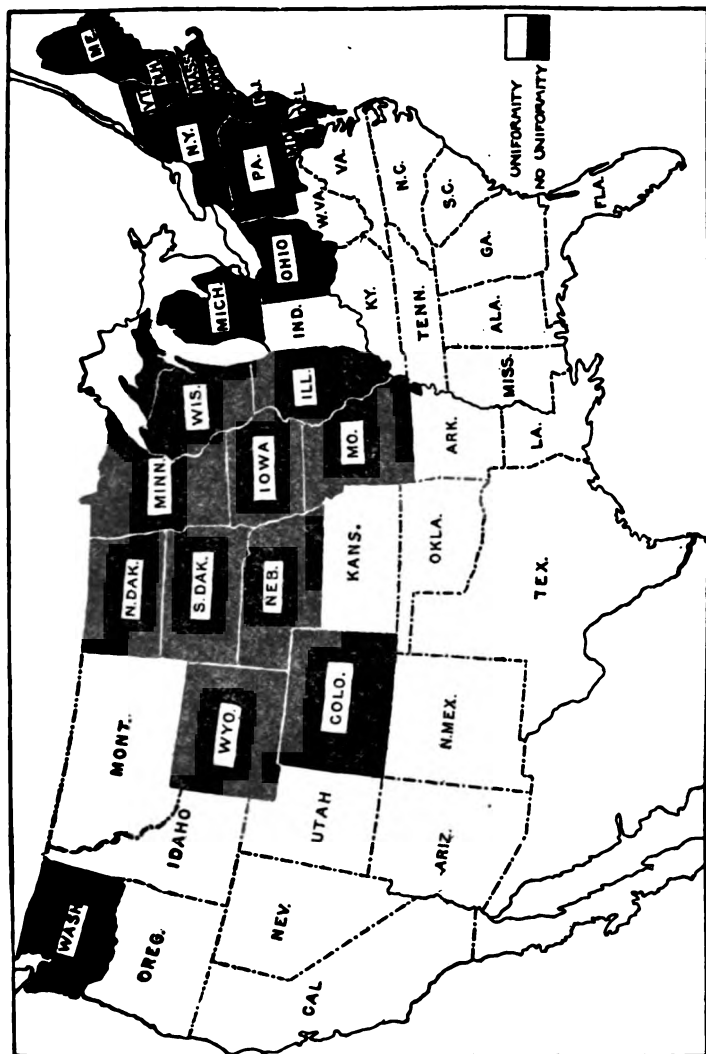
TABLE 6.—*States grouped according to the composition of the State boards of education and State textbook commissions.*¹

State board of education composed of—		State textbook commission consists of—		
Nonpolitical appointments and ex-officio education officers.	Political officers serving ex-officio.	State board of education.	State board of education and additional appointed members.	Specially appointed board.
Arizona. California. Delaware. Georgia. Idaho. Indiana. Kansas. Louisiana. Montana. New Mexico. Nevada. Oklahoma. South Carolina. Tennessee. Utah. Virginia. West Virginia.	Arkansas. Florida. Kentucky. Mississippi. North Carolina. Oregon. Texas.	Arizona. California. Delaware. Georgia. Idaho. Indiana. Louisiana. New Mexico. Oklahoma. South Carolina. Virginia.	 Nevada. North Carolina. Tennessee.	Alabama. ² Arkansas. Florida. Kansas. Kentucky. Mississippi. Montana. Oregon. Texas. Utah. West Virginia.

¹ Bureau of Education, Bulletin, 1915, No. 36.

² No State board of education.

Investigations upon the part of the Bureau of Education have shown that many educators advocate county or township adoptions



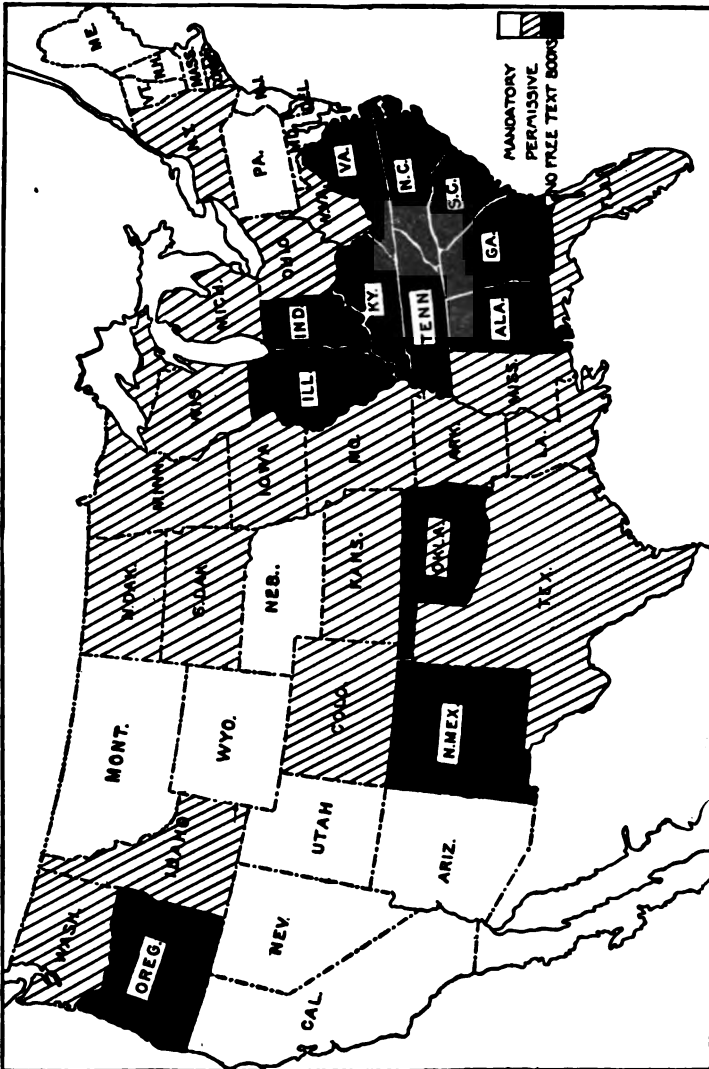
TEXTBOOKS: STATE UNIFORMITY.

as a happy medium between State uniformity and local district adoption. (See Bureau of Education, Bulletin, 1915, No. 36.)

HISTORY OF FREE TEXTBOOKS.

As early as 1818 Philadelphia provided free textbooks for the children attending its public schools. Massachusetts, in 1884, passed the first State-wide mandatory free textbook law. Free textbooks in all public elementary schools are mandatory in 17 States, 13

of these are mandatory in public secondary schools as well. In 20 other States local school districts in the city, township, or county may supply free books. In practically all of the States books are furnished free to indigent children.



FREE TEXTBOOKS.

It is generally agreed that the logical plan for giving every boy and girl in the United States an equal opportunity is for the State to furnish the textbooks free of charge. It is generally recognized that where compulsory educational laws are enacted and enforced, free textbooks should be provided for the children who are brought into school under the provisions of this law.

Under the general system of education in the United States the three principal actors are the school plant, the teacher, and the textbook.¹ The textbook is undoubtedly emphasized much more than it should be, but it will hold its position of importance at least as long as the present large proportion of untrained teachers are employed in the public school systems. The untrained and the partially trained teachers must "lean" on the textbook; they must rely upon it both for subject matter and for method of teaching. *It is important, therefore, that good books, selected by competent authority, be in the hands of all children, rich and poor alike. In no other way can this requirement be met except through free books.*

The adoption of free textbooks does not add greatly to the cost of the public school system, hence the rate of taxation is not materially increased.

From investigations made by the Bureau of Education the total annual sale of textbooks for each child enrolled in the public schools is approximately 78.3 cents. The total expenditure per child is perhaps 10 or 15 cents more than this amount which would include commissions, local dealers' profit, etc.

The cost of textbooks will amount to a trifle more than 2 per cent of the total cost of maintenance, support, and equipment.

There are many children too poor to pay for books and yet too proud to ask charity, and many others to whom the cost is such an important item that school authorities hesitate to change the books in use even when much better results might be obtained by a change.

The principal arguments advanced in favor of free textbooks are:¹

1. Poor children whose parents are unable to purchase books, or are unable to do so without great sacrifice may attend school as well equipped in this respect as the richer children.

2. Uniformity of textbooks in each school administrative district is secured.

3. Textbooks may be changed with little inconveniences whenever changes are desirable.

4. Additional textbooks and supplementary books may be supplied.

5. Schoolwork is not delayed at the beginning of the school year while parents obtain books for their children.

The principal arguments advanced against free textbooks and in favor of the pupils purchasing their own books are:

1. Parents and pupils are made to realize that they can not become wholly dependent on the State, but must continue to assume some of the responsibilities of education.

2. On account of the cost, increased school taxes would be necessary or the amount available for salaries and other expenses would be decreased.

3. Children should not be required to use books soiled by other children, as they are objectionable to the majority of children and parents both for esthetic and sanitary reasons.

4. By purchasing textbooks home libraries may be built up.

5. Books furnished free are not cared for as are those owned by the pupils. On the other hand, because the free textbooks are public property intrusted to the pupil, to be paid for if damaged or lost, and frequently inspected by the teachers, it is claimed that they are as well or better cared for. The care the books receive depends entirely upon the way in which the system is managed.

The consensus of opinion among teachers, superintendents and school authorities wherever free books have been furnished to children is strongly in favor of the system. The reports are practically unanimous that the plan is successful. An inquiry was

¹ Bureau of Education, Bulletin, 1915, No. 36.

made a few years ago among cities in the United States furnishing free textbooks. This inquiry asked for information as to whether the plan was generally satisfactory; 74 cities reported yes, 6, partially, and no cities reported no.

ADVISABILITY OF STATE-WIDE ADOPTIONS AND USE OF LIBERAL SUPPLEMENTARY LISTS.

The arguments given above for and against the advisability of free textbooks and State uniformity all bear directly upon the question of State-wide adoptions. One of the main objections urged against State-wide adoptions is that the State must adopt a certain book for a definite period, three, four, to eight years, and that that book must remain the permanent textbook for that period. This is sometimes modified by a provision for revision of the textbook during this time or for the adoption of a revised edition during the term of the contract. Another objection, and possibly the most serious one, is that the books adopted in a State of diversified interests are not adaptable to the different sections of the State. This objection may be met by the use of a liberal supplementary list which allows the local authorities to choose the books best adapted to their locality.

Over one-half of the States that now have uniform textbooks in the public schools provide a liberal supplementary list.

QUESTION OF ADVISABILITY OF PUBLICATION OF TEXTBOOKS BY THE STATE.

Reports from the two States, California and Kansas, that have adopted the plan of publication of textbooks by the State are as follows:¹

In California the legislation permitting the publication by the State of textbooks was passed in 1883, and it continued practically without change for 20 years. It is characterized by the author of the history of the State printing of textbooks in California as "a time of contention, strife and abuse, very disquieting to those who are responsible for the enterprise." The close of this period found the State publishing 14 textbooks, and during this period four million books were made and sold to the people for a million and a half dollars. It was then determined that although the books must be manufactured at the State printing office, copyrights or plates could be leased or purchased from outside sources.

The cost for the first two and one-half years, including the original stocking up of the schools, was roughly half a million dollars. There are about 400,000 children in the schools, so the total cost per child per year is approximately 50 cents. This includes the expense of distribution, but does not include such additional or supplementary books as are purchased by the local schools. The law forbids requiring pupils to buy any books whatever.

However, there are two sides to the matter. As a matter of cold fact, the books in the past cost quite as much under local authorship as they have since. It is possible that we could do it better now, however. The local authors have to be paid in one way or another; and the editorial work, the mechanical work of preparing the books or publication, add to the cost. The royalty represents the author's compensation, the

¹ Bureau of Education, Bulletin, 1915, No. 36.

expense of preparing the plates, the cost of exploiting the book into a well known and popular one that California would accept, the loss of unsuccessful books, and the publisher's percentage of profit.

In Kansas the following report from the State superintendent will explain the conditions under which the law operates in that State.

Under this provision the State school-book commission has just completed the adoption or approval of a complete list of high-school textbooks for the five-year period beginning May 1, 1915. The prices at which these books are to be furnished to dealers by the various publishers are uniformly 75 per cent of the publishers' list price f. o. b. Chicago, with the privilege on the part of the State of immediate publication of the geometry from plates furnished by its publisher at a royalty of 28 per cent on the list price, and a similar privilege as to the composition at the end of three years. It is, therefore, the plan of the State to reprint at once geometries for the use of pupils beginning next September.

In addition to those previously mentioned as having already been published, the commission is planning to publish as rapidly as possible a complete series of common-school texts, existing adoptions upon all which expire within the next two years.

Owing to the limited appropriation of \$100,000 available for publication purposes, however, it will probably be impossible to provide for the printing of more than half the list within that time.

It is doubtful if many States will consider seriously the question of publishing their own textbooks. In the Massachusetts Legislature of 1915 the State board of education was instructed to make a study of textbook publication by the State and report back in 1916 on the advisability of its adoption. In the 1915 sessions of the State legislature in five States bills were introduced providing for the State printing of books, but none were passed.

SOME POINTS FOR CONSIDERATION IN FRAMING LAWS GOVERNING TEXTBOOKS.

1. Free textbooks give greater opportunity to all classes of pupils, cost less than when purchased by the individual, and aid the teachers in meeting the requirements of the course of study.

2. Uniform State textbook laws should make provision for a liberal supplemental list of books in reading, history, literature, geography, etc.

3. The printing and publication of school textbooks by the State is a doubtful experiment under present conditions.

4. The adoption of State textbooks by the State board of education seems to give general satisfaction.

5. The time limit of adoption should not be over six years and provision may be made for changing certain textbooks every four or five years.

	Law mandatory for all State schools.		Law permissive, applicable to schools of—				
	Elementary.	Secondary.	Entire State.	Certain counties.	City or township.	Local school district.	Union free.
Alabama.....	X	X					
Arizona.....			X				
Arkansas.....	X						
California ¹					X	X	
Colorado.....					X		
Connecticut.....	X	X					
Delaware ²	X	X					
District of Columbia.....	X	X					
Florida ³				X			
Georgia.....				X			
Idaho.....							
Illinois.....				X			
Indiana.....				X			
Iowa.....			X			X	
Kansas ⁴							
Kentucky.....	X						
Louisiana ⁵	X	X					
Maine.....	X	X					
Maryland.....	X	X					
Massachusetts.....	X	X					
Michigan.....						X	
Minnesota.....						X	
Mississippi.....						X	
Missouri.....				X			
Montana.....	X	X					
Nebraska.....	X	X					
Nevada.....	X	X					
New Hampshire.....	X	X					
New Jersey.....	X	X					
New Mexico.....					X		X
New York.....							
North Carolina.....						X	
North Dakota.....					X		
Ohio.....							
Oklahoma.....							
Oregon.....							
Pennsylvania.....	X	X					
Rhode Island.....	X	X					
South Carolina.....				X			
South Dakota.....							
Tennessee.....			X				
Texas ⁶	X						
Utah.....	X						
Vermont.....	X						
Virginia.....			X				
Washington.....						X	
West Virginia ⁷				X			
Wisconsin.....				X	X		
Wyoming.....	X	X					
United States.....							

¹ Permissive in secondary schools.² Except Wilmington City.³ Two counties.⁴ Supplementary readers free.⁵ For New Orleans only.⁶ Districts having special tax.⁷ Magisterial districts.

TABLE 8.—*Uniform textbooks.*

Laws applicable to—

	State.	County.	Township and district.
Alabama.....	x		
Arizona.....	x		
Arkansas.....	x		
California.....	x		
Colorado.....			x
Connecticut.....			x
Delaware.....	x		
District of Columbia.....	x		
Florida.....	x		
Georgia.....	x		
Idaho.....	x		
Illinois.....			x
Indiana.....	x		
Iowa.....			x
Kansas.....	x		
Kentucky.....	x		
Louisiana.....	x		
Maine.....			x
Maryland.....		x	
Massachusetts.....			x
Michigan.....			x
Minnesota.....			x
Mississippi.....	x		
Missouri.....		x	
Montana.....	x		
Nebraska.....			x
Nevada.....	x		
New Hampshire.....			x
New Jersey.....			x
New Mexico.....	x		
New York.....			x
North Carolina.....	x		
North Dakota.....			x
Ohio.....			x
Oklahoma.....	x		
Oregon.....	x		
Pennsylvania.....			x
Rhode Island.....			x
South Carolina.....	x		
South Dakota.....		x	
Tennessee.....	x		
Texas.....	x		
Utah.....	x		
Vermont.....			x
Virginia.....	x		
Washington.....		x	
West Virginia.....	x		
Wisconsin.....		x	
Wyoming.....			x
United States.....			

Textbook laws providing for State adoptions should include the following features:

(1) All cities having a population of 25,000 or over should be exempt from the use of books adopted for the State as a whole and be permitted to adopt their own textbooks.

(2) There should be a textbook committee of professional educators, carefully selected by and responsible to the State board of education. This committee should be large enough to include persons having special knowledge of the content and method of teaching of all the more important subjects of the elementary and high-school curriculum. It should not include any member of the board of education. Its members should be paid sufficient salaries

to enable them to give all the time necessary to the duties of their office.

(3) Since in most of the rural schools the textbook is followed closely, almost slavishly, the merits of the books and their fitness for use in the State should be considered by the textbook committee in making adoptions, and the recommendations of this committee should be final. Small differences in the prices of books are not sufficient to make any appreciable difference in the cost of the education of the children of the State, and should not be considered in the adoption of books.

(4) All adoptions should be for a period of five years, and it should not be lawful to change more than one-third of the total list of books in any one year.

(5) All adoptions should be made in executive session of the textbook committee and after a year's study and trial of all the more important books of the titles to be adopted.

(6) All books in series should be so changed that children progressing normally through the schools may finish any subject without change of series. For example, when a new series of readers is adopted, the change of First Readers should be made one year, the change of Second Readers the next year, and so on.

(7) New books to be used in any year should be adopted not less than four months before the time of the opening of schools so that there may be ample time for their manufacture and purchase and distribution.

(8) The law should include all necessary guaranties against political and financial influence in the adoption of books.



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BULLETIN, 1919, No. 5

INSTRUCTION IN MUSIC

By

WALDO S. PRATT

*Advance Sheets from the Biennial Survey of Education
in the United States, 1916-1918*



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INSTRUCTION IN MUSIC.

By WALDO S. PRATT.

CONTENTS.—Depletion in the number of teachers and pupils—Some decrease among independent schools—The transference of music teachers into Army work—Military band development—Camp singing and community music—Discussions about standardization—School credits for outside music study—Other points of progress in public schools—Notable features in private instruction.

In instruction in music, as in other related fields, the outstanding feature of the biennium 1916-1918 is the interference or readjustment occasioned by the European War. On the whole, although there has been some serious disarrangement, the direct or indirect benefits overbalance the losses. In the present rapid summary it will be convenient to mention (1) one or two lines of disturbance from war conditions; (2) several directions in which these conditions have induced novel efforts; and (3) certain points of discussion or progress not connected with war conditions.

DEPLETION IN THE NUMBER OF TEACHERS AND PUPILS.

Depletion in the active staffs of music schools, both independent and affiliated, in the large body of music instructors in public schools and in the host of private teachers has been notable during the past two years. The drain has come not only from direct enlistment or drafting into military service, but from the manifold demands for indirect service. Institutional faculties have been much affected by calls to members to give up their usual forms of work for temporary activity in other directions. The same causes have operated to produce a decided decrease in many instances in the total number of students, both in institutions (except public schools) and under private instruction. Pupils have been considerably influenced by the economic stringency of the war period. The small private teacher and some of the detached music schools seem to have been the most affected. Some individuals have suffered badly.

SOME DECREASE AMONG INDEPENDENT SCHOOLS.

A considerable number of the independent music schools have ceased to exist during the past two or three years. It is not clear whether or not this is due to war conditions. But the fact is noticeable enough to call for a word of comment.

There is no accepted criterion as to what constitutes a "music school." Ten years ago, when Dr. Arthur L. Manchester prepared for the Bureau of Education his bulletin on "Music Education in the United States" he was constantly confronted by this problem of definition. The name of a "school" is occasionally claimed by an individual, or a married couple, or some casual combination of two or three. It is common when a larger number agree to pool expenses and exchange clientage. A surprising proportion of the "music schools" of the country are not much beyond this rudimentary stage of organization. Comparatively few have a curriculum, or require anything from students except regular attendance and prompt payment of bills. The large majority of these students would in any other analogous professional institution be classed as "specials" or "irregulars."

But all small and loosely organized schools are in competition with two other kinds of institutions. One is the strong conservatory in the large city, drawing students from a wide area, with a numerous and diversified faculty, offering many collateral advantages in the way of recitals, concerts, and lectures, and having traditions that favor breadth of training so as to gain some degree of general musicianship. The other is the department or school in a college or university system, where the organization and spirit of the total institution naturally control the work of each constituent part. Both of these types offer much that small and isolated private schools can not give. It appears that the stress of war conditions has heightened this contrast. Of course, a small school is not to be disdained because it is small. Some such are efficient and useful. There is also no objection to cooperative unions of teachers for business reasons. The criticism is to using the name "school" for that which has no clear scholastic purpose or policy. If the pressure of war conditions is reducing the number of these institutions, the progress of musical education will not be much damaged.

THE TRANSFERENCE OF MUSIC TEACHERS INTO ARMY WORK.

A conspicuous effect of the war has been the widespread summons to teachers of singing, particularly supervisors in the public schools, with many instrumentalists as well, into constructive musical work at army cantonments, with the forces abroad, or in public situations related to these. The basis of all this has been the recognition by the Government of the recreational and moral value of music in life, and the parallel recognition by the Young Men's Christian Association and similar organizations engaged in welfare work among soldiers and sailors. The effect of all this has been twofold—the effect upon those thus called as individuals, and the effect upon those among whom they have worked.

It is clear that the army experience of the scores of teachers thus drafted into novel service will be of lasting benefit to them personally. Those who came from the public schools, and many others as well, had been dealing almost wholly with children or adolescents, and more with girls than with boys. In their new work they were confronted by throngs of grown men. This experience has been wholesome and broadening, since the work must justify itself to minds of a critical and impatient order. No doubt in most cases the authorities regarded musical drill mainly as a means of intensifying martial ardor, while the men themselves accented merely jolly goodfellowship and heedless diversion. Yet every serious musical worker has seen the chance to turn even camp music into a real educational force. Particularly has this been stimulated in some situations across the sea, where American troops have been in close contact with French or Italians, and could catch from them a readiness and delicacy of artistic appreciation that is rare in this country.

It is much too soon to say what will be the result of all this army work when demobilization has been accomplished. It would be foolish to expect universal or spectacular consequences. But considering that perhaps four millions of young men have been more or less touched by this musical work, it is likely that large numbers have discovered in it what they had not realized in the way of emotional uplift and also of associational value. It is probable that their attitude toward music for themselves, for their families and for their communities will be more sympathetic and enterprising than in the past. Even if the percentage of such recruits in musical interest is small, their absolute number will be large and their geographical distribution wide.

MILITARY BAND DEVELOPMENT.

At this point a few words should be said about the development of bands and band music in the Army and Navy. Not having had any extensive military establishment, the United States for half a century has given slight attention to this subject. When the Expeditionary Force was first gathered and dispatched there were neither leaders nor players nor instruments available properly to equip the various units. Yet it was speedily seen that band music was of more than decorative importance. But it could not be instantaneously created. All sorts of expedients were tried, both here and abroad. What has been accomplished was creditable, considering the difficulties. For a period Walter Damrosch, the well-known New York conductor, served efficiently in France as a center for some intensive training. But the problem has had only a partial solution. Although we need not look forward to the long maintenance of

such huge forces as during the last year or two, yet for a considerable time their number will remain larger than anything that we have had since the Civil War. For these careful provision of band music is demanded. This immediate need, with regard also to the future, will probably lead to the establishment of one or more governmental schools for training leaders and players or to arrangements with existing agencies for special instruction. Something of this sort has long existed in an imperfect form. One large New York school, for example, has encouraged successive classes of pupils from the military post at Governor's Island, and other institutions are well equipped with band facilities. Now, we may hope, still further steps will be taken to develop the cultural possibilities of many permanent and well-drilled bands, to be used both in military connections and in public service.

The value of this can be seen by recalling what band music has meant for generations in the military and social life of every leading European country. Great Britain, France, Germany, and Italy have been solicitous for this and have made it a real branch of popular education. It is interesting to remember that one of the forerunners of the Paris Conservatoire was the Institut National, founded in 1792, which was primarily a school for military music, and that this element was so prominent that its head, the bandmaster Sarrette, became the first director of the Conservatoire, remaining in office for 20 years. In every garrison town of Europe the military band is one of the established agencies of musical presentation. We have something analogous to this in our town and city bands, but these have not yet attained the influence or dignity generally that is possible.

CAMP SINGING AND COMMUNITY MUSIC.

At first sight the cultivation of singing in soldiers' camps and the far more general interest known as community music have little direct connection. It is a fact, however, that the efforts put forth primarily for the former have had a marked influence upon the advance of the latter. The two will therefore be treated here somewhat in combination, as has already been done by the Secretary of War in his Annual Report for 1918:

A great deal of attention has been given to music through mass singing in camps and communities, singing on the march, competitive regimental and company singing, recreational singing in soldiers' free time, the organization of quartets, glee clubs, and choruses, and the training of company and regimental song leaders to aid the camp song leader. In order to have all the men singing the same songs, songbooks containing patriotic songs, folk songs, popular and service songs, and some hymns were published and distributed. Experiments with vocal and instrumental music in hospitals proved so effective with certain types of cases and so acceptable to the hospital authorities that the matter was

referred to the Surgeon General's Office with a view to its transfer to this department. The services of the camp song leaders have frequently been borrowed by near-by communities. Community singing—the singing of songs the soldiers have been singing—has spread all over the country, and the possibilities, as to both military and civilian morale, are highly significant. A singing nation will emerge from the war.

The immediate educational influence of the soldiers' singing has been widely recognized. Although the grade of music attempted has not often been specially good, to many men it has been a revelation that they could sing, that choral music has a singular fascination and power, and that music thus produced is worth working for. Chorus practice is always impressive as a practical illustration of cooperative effort—as a demonstration of democracy in action. Hence, in addition to the artistic development that it brings, it has important social reactions. The universal testimony is that the system that has been put in force in all cantonments and camps has been immensely valuable. One reason for its success is that many leaders of superior quality have been secured, that they have served under authoritative commissions and with the full support of the commanding officers, and that from the first their efforts have met with enthusiastic welcome by the majority of the men.

Directly radiating from this camp music have been two or three undertakings outside. One has been the supervision to some extent of the recreational opportunities in the neighborhood of cantonments and camps, including both musical and theatrical features. The musical importance of this has probably not been great, except in the exclusion of some inferior performances. Another, which is of decided significance, is the organization of so-called "liberty choruses" in towns and villages generally. Comprehensive statistics about this are not yet available. But in Connecticut, which was more or less a pioneer in this work, some 90 choral centers were established last summer in the space of about three months. Many of these seem likely to continue active for a long time, perhaps even to grow into permanent choral societies. This line of effort is so promising that it is now being supervised and systematically promoted by a commission called the War Camp Community Service (1 Madison Avenue, New York City), conducted by the Playground and Recreation Association of America for the War Department and Navy Department Commissions on Training Camp Activities. Besides a general director there are State directors already in service in a large number of States.

All this has obvious relation to every other enterprise that looks toward the stimulation of community music. Such music has been promoted more or less for a considerable time. The methods used have varied much according to circumstances. In some cases rather

large community choruses have been set up, with regular rehearsals and some concerts, occasionally with soloists and orchestra. In other cases neighborhood "sings" of a much humbler variety have been the goal. Municipal orchestras and bands, supported by public authorities, are growing more common—slightly resembling in function the old "Town Musicians" that once flourished in Germany. A number of cities maintain regular series of free organ recitals by a resident city organist. The most comprehensive plan just now seems to be that of Flint, Mich., which has appointed a city director of music on a liberal salary, expecting him to devote his whole attention to developing community music in every possible form.

Here reference should be made to the fact that more than one of the State universities is giving special attention to this subject. The University of Illinois announces that one of its main objects in carrying on its large and well-equipped department of music is to encourage and uplift the plane of community music. This university has for years made a specialty of band music, and its bands circulate more or less through the State for educational purposes. The University of Wisconsin has long emphasized the holding of local singing assemblies—distantly related to the old-fashioned "musical conventions"—and the training of teachers competent to act as leaders in popular music. The opportunity for this sort of influence is beginning to be recognized by some independent music-schools, as well as by an increasing number of private teachers.

The movement is still very much in its infancy. It has no tradition behind it and not yet an organized momentum. Many would-be supporters are in the dark how to proceed. In some places there is a lack of suitable leaders. Everywhere there is a lack of varied music for singing. A few small collections of "familiar" tunes have been put forth, which are good enough as far as they go but they do not go far. The circulation of much material of present interest is hampered by copyright restrictions. Our American population really has no body of traditional songs. This is partly due to our racial and national complexity. And the custom of singing has not been general among us, nor that of frequently gathering for the hearing of music. Yet what has always been affirmed by thoughtful musicians is being demonstrated more and more, that there is latent in people generally a large capacity both for song and for appreciation, provided that the proper opportunity can be supplied. It is increasingly clear that difficulties will be overcome and that true community music will spread throughout the Union.

This movement has a vital relation to formal education in music. The latter can never safely allow itself to become exclusively professional. Advanced musical culture cannot be supported except on a basis of popular interest, and it will be unhealthy in quality

unless it refreshes itself by contact with the unconscious and even homely sources of all universal fine art.

Before leaving the subject, brief mention should be made of one phase of the military work that stands slightly apart from what has been mentioned above. This is the development of singing in the Students' Army Training Corps. Here the men in view were mostly from schools or universities. Musical work adapted to them was hardly organized and put in motion before the signing of the armistice opened the way to their demobilization. But it is felt by those who have been specializing in this work that the response to it was so promising that a way should be found to continue it nationally. Whether a suitable method for doing so can be found is not yet clear. But if such a method is feasible, the result would be to connect the well-known zest for singing among students with the larger movement for community music.

DISCUSSIONS ABOUT STANDARDIZATION.

Turning now to matters disconnected with war conditions, there is probably no question more discussed among musical educators than that of standardization. This question especially concerns private teachers and those working in the public schools. It may progress to results that will profoundly affect the entire circuit of education in music.

A few years ago much emphasis was put by some upon the value of fixing a minimum standard of qualification by requiring all music teachers to secure a State license or certificate. This aimed at debarring ignorant and incompetent teachers from "practicing," as it is called in medicine or law. Detailed efforts to secure the enactment of such restrictive statutes were made in more than one State, but without much result except to demonstrate the extreme difficulty of the enterprise. This line of effort seems lately to be less prominent. It is to be hoped that it will not be pressed, at least in the form thus far advocated. There may come a time when some restriction of music teaching by law may be both practical and useful. That time, however, has not yet come.

Meanwhile two or three other lines of effort under the name of standardization are being actively discussed or undertaken. In general, these divide into two classes: Those that aim to standardize teaching proficiency, though not by statute, and those that aim to standardize methods of study and credits to students. Both of these are more or less before the national and the several State music teachers' associations, and some of these bodies have worked out plans that are in operation. Both are voluntary in nature rather than coercive, and both therefore appeal primarily to ambition as a motive. Whether or not either of them results in the adoption of

a system of wide application, agitation of the subject is proving profitable because it increases the thoughtfulness and precision of music teachers as to the aims and methods of their work.

In England and Canada the certification of music teachers has long been carried out with great thoroughness, especially with reference to work in the board schools, but extending by popular favor more or less to all teachers. It accomplishes nearly the same results as have here been sought through legislative action. Something parallel to it is gradually being established here. Established music schools, music departments in certain colleges and universities and many normal schools have courses for teachers that lead to certificates whose value is recognized, and applicants for some positions are expected or required to hold such certificates. Efforts have recently been made by more than one of the State music teachers' associations to set up a system of examination and certification of their own—as was done years ago by the American College of Musicians.

This line of effort is now engaging the thought of many serious musicians, and it is leading to the formulation of interesting and valuable schemes of knowledge and accomplishment to be demanded for teachers of singing, playing, and theory. Its reaction upon those who are discussing it is evidently stimulating, and also its effect as concerns those to whom it is applied. But whether it is to have large influence depends upon two incalculable factors: The number who will be moved to take advantage of it, and whether the public will value such certificates enough to demand that teachers generally shall hold them. Another practical question is as to the persistence, patience, and wisdom with which the associations pursue the matter from year to year. Dependence upon unpaid officials who shift more or less is precarious. And at present there is no State association that includes any dominant proportion of the music teachers in its territory. Though this fact detracts somewhat from the authority of such associations, the moral influence of what they undertake would be considerable if steadily and strongly exerted.

Rather more practically hopeful are the constant debates about stipulated courses of study in various musical subjects, with the marking of successive grades of attainment desired. From the nature of the public school system it follows that where music is introduced in parallel with other subjects the course of study in it must be marked out with much precision. Hence formulated courses have long been establishing themselves in public school music. Analogous conditions exist wherever music is introduced into the system of colleges or universities, though the number and variety of specific topics considered are much greater. The difficulty of the problem in higher education is obviously more serious. There seems

to be a growing conviction that formulated or standardized methods—either of the ordering of topics and material or of pedagogical presentation, or both—should be urged upon private music teachers generally, if not to a degree demanded of them. The question is in part whether private teachers should be expected to follow the system that is somewhat necessary in public schools and colleges. In part it is whether music as a subject of teaching should be made to conform in method to various other subjects. In either case, it is claimed, its methods should be standardized.

It can hardly be said that the discussions of the past two years have contributed vitally to the solution of the very complicated problem thus outlined except in one direction, that will be separately treated in the next section of this survey. Yet they have been fruitful in clarifying thought. On the one hand, foolish notions of an immediate and rigid scheme that would regulate everything and everybody have been discountenanced. On the other, many rational and suggestive plans of work have been drafted, and these have doubtless served to correct the slipshod or eccentric methods of some individual teachers. There is certainly a growing understanding of the nature and elements of the problem. But there is no obvious consensus as to final details.

It is natural that the interest in this matter should have stimulated the promulgation of series of textbooks or other manuals that claim to embody a "standard" course and method of study. This idea has been often exemplified in the history of modern musical education, as in other education. It always serves to increase the store of literary contributions by what certain workers can use to great advantage, and represents the mature thought of one or more experienced authors or editors. All such publications are therefore to be welcomed. But they are liable to bring in commercial elements of doubtful value, especially when improperly promoted. It should be clear that authoritative "standards" can not be established by publishers merely as a business proposition. And, in general, the subsidizing of teachers to use "exclusive" systems is to be deprecated as demoralizing.

It is to be noted, finally, that through all discussions about standardization there runs a line of persistent objection. The basis of this is that music is not a thing nor even a precise muscular or logical discipline, but a psychological experience. It has its objective or physical aspects, of course, which can be somewhat precisely stated and can be learned or acquired like other technical matters. But these, it is well known, are external or accessory to the art itself. It is because of this that so much of musical instruction has always been individual rather than by classes, by the personal impact of a teacher upon a pupil rather than by means of impersonal textbooks. Much

of the current talk about standardization seems to overlook or minimize this fundamental peculiarity of all art education as compared with science education. And, at all events, the range within which standardization can hope to operate is small. It can do little more than fix some irreducible minima of purpose or attainment. With the reaching of the possible maxima it can have little place, since the higher the level of advance the more infinite and intricate become the paths that may be followed.¹

SCHOOL CREDITS FOR OUTSIDE MUSIC STUDY.

In public-school music the most notable event in the past two years is the interest in plans for granting credit for music study with outside teachers. This idea is not new, but at present seems likely to be put in practice in various places and ways as soon as war conditions are over.

The elements of the case for such credit are readily understood. It is generally agreed that music study, to be educationally effective, should begin during "school age," and this is true not only for the few who may choose music as a life work, but for others. Investigation shows that a very large percentage of the boys and girls in the public schools, especially in cities, are taking, or much desire to take, music lessons while attending school.² If such outside work is educationally worth while, or can be modified so as to be so, pupils ought to gain credit for it toward school advancement rather than be forced to get it as an extra. With these propositions as a basis the practical questions have been two: (1) How shall the educational value of such studies be guaranteed? (2) Will the school authorities allow credit for such study thus guaranteed? The onus of defense has been thrown back and forth between the parties in interest—some musicians feeling that the schools must show cause why the innovation is not adopted forthwith, and some superintendents feeling that either all music study is frivolous or the method of it is too loose to be deserving of credit. But during the past two years there has been an increasing disposition to turn from vague presuppositions pro or con and consider soberly in precisely what ways outside study could be allowed school credit. This has forced school authorities and music teachers to combine in drafting specific plans.

The most carefully elaborated plan now accessible is one drawn up by a commission of 15, appointed by the National Education Association, most of whom are also active in the Music Teachers' National Association, and which represents the best views of both

¹ Specially useful papers upon this subject are contained in the last two volumes of the *Proceedings of the Music Teachers' National Association*, namely, 1916, pp. 165-185; 1917, pp. 199-226. See also further references to these volumes under next section.

² See a remarkable account of an investigation made in Hartford, Conn., in 1912 in the *Proceedings of the Music Teachers' National Association*, 1913, p. 179.

sides of the question.¹ It makes provision for special registration of the students eligible for such courses, for periodic reports from the outside teachers to the school authorities, and for examinations before credit is allowed. Data are not at hand as to how far this plan, or some modification of it, has actually been put in force. But that the idea it embodies is now meeting with extensive interest is evident, especially in the East and the Middle West.²

Incidentally this movement in school music is effecting some definite results in the way of standardization. The subjects that have been specially considered are the playing of the piano, the organ, the violin, or any orchestral instrument and singing. In each case it has been necessary to work out in detail a definite plan of study that shall be satisfactory at once to outside teachers and to school authorities, and this plan has had to be adhered to firmly in order to meet conditions. Every such effort does something toward erecting practical "standards" by experiment rather than by theory.

Another excellent result of this line of effort is that it brings together the interests of private music teachers and the teachers in the schools. Each group may learn much from the other, just as professional musicians generally, as a group, and the teachers of advanced music in colleges and universities, as a group, may also learn from each other. There has been too much division of the music-teaching profession into separate camps, each jealous or suspicious of the other.

OTHER POINTS OF PROGRESS IN PUBLIC SCHOOLS.

Many signs indicate that several forms of class instruction in the public schools have made decided advance during the past two years. Conspicuous among these is work in music appreciation, in advanced chorus singing, and in orchestral playing. The gain in the first two is simply in detail of method and in scope of influence. Both are well established in high schools and are being handled in many places in such a way as to render genuine artistic service. The institution of school orchestras, not as an outside feature of school life, but as in some way a part of school instruction, is more recent. But this, too, is commending itself as peculiarly valuable. This latter promises to develop in most of the larger cities. All of this mass instruction in the public schools has an evident relation to the future advance of community music. The orchestral instruction also may prove to have an interesting vocational aspect.

¹ This report, so far as relates to this subject, was first printed in the *Proceedings of the Music Teachers' National Association*, 1916, pp. 105-107. It is also given in the *Proceedings of the National Education Association*.

² Besides the *Proceedings of the National Education Association* and the *Music Teachers' National Association*, to which reference has been made, the *Music Supervisors' Journal of the National Conference of Music Supervisors* supplies many practical notes.

NOTABLE FEATURES IN PRIVATE INSTRUCTION.

The past two years have not seen many notable changes in the aims or methods of private instruction. Regarding two points, however, a brief remark may be made.

There is a steady increase in the emphasis put by intelligent teachers upon the careful training of little children. Many teachers specialize in work for them, and these have often developed methods of their own that are effective in evoking permanent musical interest and ability. And all teachers of thoughtfulness are realizing that true artistic life may begin in the child's mind before it is ready for effort of a logical or scientific order. It may be that the comparative rarity of evident musical enthusiasm or capacity in the general American public is partly due to a failure hitherto to give due attention to the education of younger children.

In the teaching of harmony there is a marked tendency to desert the paths that once were considered regular and to experiment with all the new speculations concerning musical construction that have appeared in recent years. It is evident that musical thought on these matters is passing through a period of reconstruction. Procedures that were once condemned as unlawful or barbarous are being freely used, not only by composers for effect, but by teachers for technical development. So far as this serves to break up mere academic rigidity and the notion that composition is a matter of rule, it is wholesome. But when it produces an exaggerated interest in chaotic arrangement or eccentric melody and harmony for mere oddity, it may be unhealthy. The point of general interest is that leading teachers are showing a fine balance of judgment about the subject in its present stage. They are generally ready to consider and use all of the new theories that are being proposed, but they are also conservative in believing that these theories are tenable only so far as they can be connected organically with the procedures of the past. It seems likely that in the next decade there will be many textbooks prepared that will offer judicious combinations of things old and new for the guidance of future teachers and scholars.



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A HALF-TIME MILL SCHOOL

By H. W. FOGHT

SPECIALIST IN RURAL SCHOOL PRACTICE



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A HALF-TIME MILL SCHOOL.

I. THE SOUTHERN MILL PROBLEM IN GENERAL.

Introductory statement.—Until a few years ago the Southern States were considered in the main an agricultural section. More recently the advantageous location in respect to raw materials, minerals, water, and electric power of the South Atlantic States has occasioned an almost unprecedented growth in manufacturing industries. Particularly has the cotton manufacturing industry made great progress. In the early seventies there were few cotton mills in the South, and the raw materials were shipped to Massachusetts and other New England States for manufacture.

In 1916, however, South Carolina ranked next to Massachusetts in the number of spindles in use, then totaling 4,743,193, or 14.2 per cent of the entire number of spindles turning in the Nation. North Carolina, in the same year, ranked third, with 12.2 per cent of the total number of spindles in the country. In the number of persons employed and the value of its annual cotton manufacturing output, North Carolina heads the list of Southern States—being second in this only to Massachusetts—with 48,525 operatives employed and an annual output in cotton fabrics of \$72,680,382. South Carolina ranks next with 46,342 operatives and an annual output valued at \$65,929,598. In 1916 the mills of North Carolina consumed 1,067,288 bales of cotton, and those of South Carolina 914,532 bales. Meanwhile, Massachusetts consumed 1,462,188 bales. It should also be noted that the southern mill areas are comparatively few in number, but they are compact. A small number of counties with advantageous location produce the larger part of the output. Thus, Spartanburg County, S. C., heads the list, with cotton mills aggregating 830,016 spindles; Greenville and Anderson Counties, S. C., rank, respectively, second and third in the South, with a slightly smaller number of spindles; and Gaston County, N. C., comes fourth with 579,091 spindles.

These figures are enumerated here because they emphasize the important place cotton spinning has taken in the South—particularly so in North and South Carolina—and the many complex problems that this rapid change from soil tilling to industrial life has forced upon the public.

Who the mill people are.—The rapidly increasing demand for industrial workers has drawn many of the less prosperous class of the southern rural population from the hill and mountain districts to the mill centers. As a people they are homogeneous; they are all English-speaking and of Anglo-Saxon and Huguenot origin. They are, in the main, of good blood and of fair native ability, but are badly in need of direction and, above everything else, education. They have brought down with them from the hills and mountains their own social standards and manners and customs, which do not fit into the new mill environment to any extent. The greatest hindrance to progress and industrial efficiency among the mill operatives is the prevailing large amount of illiteracy, which is the unfortunate heritage from their life in the remote hill and mountain sections. It is well to emphasize, on the other hand, that the average mill family should not be considered as inferior to other people. There are as many bright minds and true hearts among them as in any average community. One southern educator, President D. E. Camak, of the Textile Industrial Institute, near Spartanburg, S. C., feels that "they have been, as it were, waiting in the mountains and hill country till civilization needed them." "With the proper training of leaders within their own ranks," he thinks, "they will speedily develop a citizenry of remarkable strength and character."

Educational needs of the mill community.—The mill community springs up usually on the edge of one of the larger incorporated towns or cities. It has none of the advantages of modern city policing and sanitary inspection, and little of school education. It is neither urban nor rural, and is often permitted to develop with little regard to public control. The operatives' homes are usually the property of the mill corporation. The schools are often organized and maintained by the same authorities, and general welfare work, so far as there is any, is under corporate control.

The mill operatives are, with few exceptions, poor and have large families. Many of the adults among them are entirely illiterate and have a very limited outlook on life. Most of them were obliged to go into the mills at an age when other children are in school or spending their time in the out-of-doors, at play. The little schooling they are able to obtain is seldom of such a nature as to prepare them for places requiring greater skill. Women work in the mills in almost as large numbers as the men. Many married women who yet have children in arms spend most of the daytime at the spindles or at the looms.

This raises the serious question as to what to do with the children who are left all day long largely to shift for themselves. Child labor conditions also have added to the seriousness of the problems con-

fronting the mill community. Children under 14 years of age have until recently been permitted to work in the mills in most of the Southern States. Under these conditions great numbers of boys and girls are growing up with little education and with a very limited comprehension of the real significance of home and community life, and the girls, particularly, are weaned away from a desire for or ability in housekeeping.

Recently South Carolina took a great forward step in the matter of child labor when the State placed on its statute books a drastic law forbidding any person to hire operatives for the mills who are under 16 years of age unless they have met certain standard educational provisions. This measure, together with the new Federal child-labor act,¹ under which interstate privileges are denied the output from mills which employ children below 14 years of age, or who work more than eight hours a day for six days out of the week—excellent as the measures are—places an additional perplexing problem upon the mill community, namely, what to do with the children during the first 16 years of their life.

Briefly, the educational needs of the mill community can be summed up in the following statements:

1. How to organize school education for the children from babyhood up to the sixteenth year of their lives.

2. How to blot out the withering blight of illiteracy, adult or otherwise, which is seriously limiting the efficiency of the mill population.

3. How to instruct the adult population so as to increase their efficiency, and so enable them to become more than mere "hands" in the mills.

4. How to assist the mill women to become better housekeepers, and the men to become better supporters of their homes and upholders of community life.

The prevailing type of mill school.—Some southern mill schools are maintained as regular public schools, drawing State and local aid through public taxation, and are regularly supervised by State and local officials. Other schools of this class are supported in part from public funds and in part by the mill corporation. Many of the mill schools are owned and maintained wholly by the mill authorities, and thus lie entirely beyond the jurisdiction of public-school officials. Some of the schools are poorly organized and inefficient, while others of this class are among the very best in their respective States. For their efficiency the privately owned mill schools must depend wholly on the public spirit of the corporation

¹ Not in effect now, having been declared unconstitutional.

which maintains them, and on the ability and clear vision of the local manager in charge of the mill. Often the school buildings are poorly constructed and ill adapted to school needs. Uncertificated teachers are occasionally employed, compulsory attendance is badly enforced, and in many other respects the schools fail to give the mill community that vital form of education so necessary to lift the mill operative above the hard conditions under which he lives.

It is significant that the public is now generally aware that it has a mill problem, and State authority is beginning to take action to remedy the old evils. In South Carolina, for example, a State supervisor of mill schools has been appointed by law to have charge of this particular group of schools. Similarly, Winthrop Normal and Industrial College, at Rock Hill, has begun to reach out to assist the mill villages in practical welfare work, which reaches from the school right to the operatives' homes, and Clemson Agricultural College is doing an equally good work in teaching thrift through home gardens, horticulture, and the like.

Catron Hall, Saxon Mills, Spartanburg County, S. C., typical of the best in this kind of village school.—Thoughtful mill owners are as quick to see the advantages of good schools and practical welfare work as anybody. The best among the mill schools are organized to teach the village children in the rudiments of learning and also to assist the parents in various ways to make the most of the new life in the mill village. A good illustration of this kind of activity, at its best, can be studied at Saxon Mills, in the outskirts of Spartanburg, S. C. The mill corporation has erected and equipped the school building—Catron Hall—which is operated in part only on public funds. Here the children from the mill homes may acquire an elementary education, no better and no worse than is procured in village communities elsewhere. The school is not particularly well adapted to prepare and instruct the children of people with limited traditions and of narrow vision for responsible citizenship and increased industrial efficiency. In this respect, all the mill schools are weak. The school does, however, give the younger children the elementary school subjects and removes from them the blot of illiteracy which has marked their parents. But this is about all it can do for the children.

On the other hand, from the school emanate welfare activities that reach every home in the village. The work is in charge of a special community worker connected with Winthrop College, who receives her remuneration from the mill corporation. The community building, which is also used for school purposes, is fitted to meet the general social needs of the village. In it are an auditorium that seats 500 people, a lodge hall, a library having approximately 900



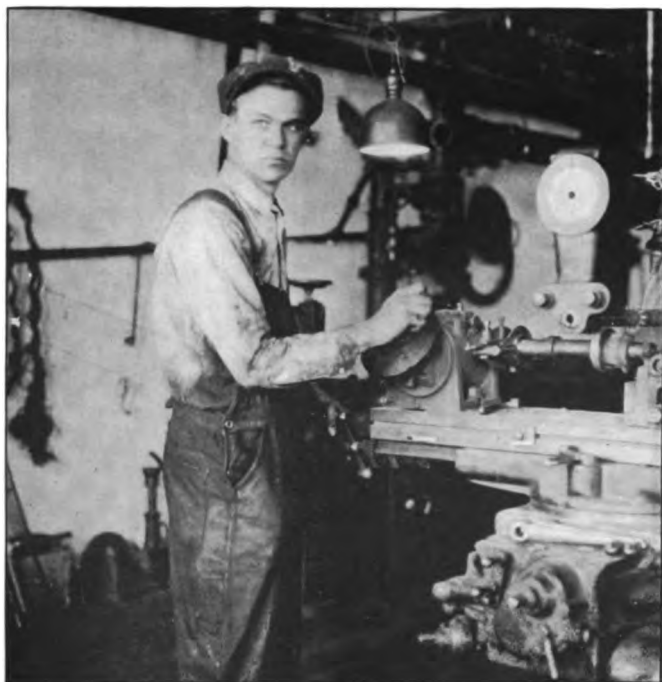
A.—DINING ROOM IN THE TEMPORARY BUILDING.



B.—TEMPORARY QUARTERS IN WHICH THE SCHOOL WAS OPENED.



A. A STUDENT EMPLOYED AT A LOOM.



B. A STUDENT WHO WORKS HALF THE TIME IN A MACHINE SHOP.

volumes, a reading room, a play room, a sewing room, a basement fitted with showers, and a room equipped as domestic science laboratory. The welfare worker has charge of the activities of the building, where lectures are held, and entertainments, games, and sewing and cooking classes. All of these are well attended by the mill community. The domestic science laboratory, in particular, has been a great blessing to the housekeepers who in their earlier days had little opportunity to learn practical housekeeping.

The welfare work embraces, among other things, living conditions in the school community, sanitary housing, and house-lot upkeep; measures to prevent disease; modern recreation, including baseball, supervised playground activities, and in the winter time hockey on the mill pond. Recently a "better babies" campaign was instituted. This culminated in a better babies' contest, in which 60 babies were entered. The babies were all examined and measured by the American Medical Association standard. It is interesting to know that 10 of the babies scored above 99 per cent, the test being made by four dentists, two ear-and-throat specialists, one mental examiner, three physicians, and a child specialist. The examination would seem to refute many of the startling tales one hears on child suffering in the southern mill village.

II. THE TEXTILE INDUSTRIAL INSTITUTE.

A NEW KIND OF SCHOOL IN WHICH TO PREPARE LEADERS FOR THE SOUTHERN MILL PEOPLE.

Wherein the ordinary mill school falls short.—The ordinary mill school at its best can do little more than provide a fair degree of instruction in the elementary school subjects for the youngest children and offer their parents occasional night-school classes. High-school facilities are practically unknown in the mill villages. Very few children complete even the elementary school course. Some drop out for lack of interest, others—in the past at least—have been taken from the school in their fourth or fifth school year and put to work in the mill. If any are so fortunate as to complete the elementary school and their parents chance to have the means and the disposition to encourage further school work, the children must go elsewhere for a secondary education. This usually means that the mill community loses them altogether.

Mill people ought to have schools that can give them more than the fundamentals of an elementary education. This kind of school should teach the importance of good birth, good health, and sanitary living. It should make clear to people their responsibility and opportunity as members of the larger social group in community

and State. It should offer practical and technical work that will help the operative to advance in his calling from a plain day laborer to a position of leadership in the textile industries. The school might include courses in textile designing, in mechanical drawing, in phases of mathematics, including mill calculation, and in electrical and steam engineering, and similar work.

The Textile Industrial Institute seeking to solve the problem.—To bring together into school the capable young men and women working in the mills who have energy and desire to improve their lot, to make of them economic and social leaders in the village community—is the aim of a new type of educational institution recently established near Saxon Mills, in the environs of Spartanburg, S. C. The purpose of the school is better expressed by President D. E. Camak in the following language: "To find, train, Christianize, and prepare leaders for the 500,000 cotton-mill population in the South."

This efficient local leadership is obviously needed outside the mills just as much as inside of them. It is needed in every-day social life, in religious work, and in industrial affairs. When each mill village can have leaders trained from among its own people, much of the present sway of political demagogues and religious fanatics will disappear, and the mill people will develop into a citizenry of remarkable strength and character.

History of the institute.—The school was founded in 1911 by Rev. D. E. Camak, of the Methodist Episcopal Church South. The founder has been a life-long student of mill people and mill conditions. He has been among them for years as preacher and teacher. When Mr. Camak first propounded his unique educational method now operative at the Textile Institute, his most intimate friends declared it "laudable but Utopian," and did what they could to dissuade him from his enterprise. But he persisted in his determination to try out the enterprise. At last the school was opened in a small way. Mr. Camak's half-time scheme had made its appeal to the president of the mill corporation, who gave the use of a small building in which the work began. Gradually students were attracted to this unique school, coming from mill villages far and near, both from South Carolina and from other States. By the close of the first winter 40 had enrolled in the school. For three successive years the institution struggled along in its overcrowded quarters. Then at last substantial aid came from a group of interested philanthropists and mill operators. One mill president gave \$4,000 worth of real estate, and one Spartanburg woman gave \$17,000. The citizens of Spartanburg contributed over \$30,000. The Southern Railway Co. hauled building material free of charge; stone-quarry owners, dealers in building materials, and architects vied with each other to assist in getting the new school firmly established.

The permanent location of the institute is on a commanding elevation. In addition to an attractive, well-wooded campus, the school owns and operates an adjoining farm of 115 acres, which supplies the school with vegetables and milk and with some of the required eggs and meat. The first building (Plate 2) is already crowded to capacity, since it has to be used for class purposes, dormitory, and boarding quarters, and living rooms for the principal and his family and the other instructors. Additional funds are, however, fortunately in sight with which to erect a second building similar in appearance to the one appearing in Plate 2.

The friends of the school hope to erect a large central administration building a little later, when the first two structures will be converted into dormitories for boys and girls.

The instructional work is at the present time done by Mr. Camak and Mrs. Camak, both of whom are college people, being graduates respectively of Wofford College and Winthrop Normal and Industrial College, assisted by a corps of well-trained instructors.

The working plan of the school.—The Textile Institute was organized for young men and women without means to pay their way through school and who, as a matter of fact, were obliged to work for a living and so had no time to attend school. Its great appeal is to the more or less illiterate mill workers in the South Atlantic States from 14 years of age and upward, who would otherwise probably go through life without an education. To be more exact, the school's appeal is to those within this group who have strong personal ambition and are willing to make real sacrifice and work hard to get an education; for the schedule of the Textile Institute is a hard and long one, which only young people of unusual determination and physical endurance can master. The real purpose and working plan of the school can best be stated in the language of President Camak as given in a recent pamphlet outlining the work of the school. He says:

The essential difference between this and any other school is the fact that no students are admitted who can pay in money. Only those are taken who must earn a living and an education at the same time by the sweat of the brow. Arrangement has been made with the Spartanburg Cotton Mills to employ students in pairs, each working every other week, and thus keeping one hand on the job constantly. The partner who is off duty in the mill is, of course, on duty in the school. There is little or no friction at either end of the line, since the pair of student workers is jointly responsible for the operation of the machinery assigned, and since in the school work the entire student-body is divided into two sections, which alternate as such. Thus two separate schools are conducted by the one corps of teachers, each school having vacation, as it were, every other week. During this week of mill work, however, they are still under school discipline, for certain courses, not taken up in day time the week before, are this week taught at night. Thus the student makes a long link in his educational chain during the day time one week and a short link during the night of the next week. In this way he manages to spend the equivalent of 7

school months at books, while by working vacation he can get paid for 7 months' mill work in 12.

Who the students are.—The daily schedule of the school is strenuous. One week calls for work in the mills from 6.30 a. m., with one hour for noon intermission—11 hours daily except Saturday, when there is a half holiday. The operatives thus work 60 hours a week. During the work week some of the students undertake in addition a limited amount of night-school work. The next week is devoted entirely to study and recitations. It should be borne in mind that many of the students are practically illiterate, but well advanced in years, the average age being about 22. Under such conditions, it is readily seen that only young people of the best physical stamina and of exceptional grit can hope to make their way through the school. But the students who get through usually emerge as prospective leaders for the mill folk. The school authorities have this to say:

None but young men and women of determined character and fixed purpose can stand the acid test of half-time work and study. Even after careful selection by form of application there is a shrinkage after enrollment. Those who have not the moral courage necessary to achieve the difficult drop out after a few weeks, leaving the other 75 per cent to settle down to a long, hard battle with poverty and ignorance. This condition of affairs insures a student body of wonderful fortitude. It is a survival of the fittest.

A careful inspection of the student body, both at the school and in the mills, disclosed that most of them are in exceptionally good physical health. In a few cases only did they appear a little fallow and worn with work. These were usually beginning students who had suffered from mal-nutrition before arriving at the institute. Every applicant for a place must produce a doctor's certificate as a guarantee that he has no contagious or infectious disease and that he is in reasonably good health. Similarly, he must have a pastor's certificate to certify "that he is a person of high moral character, capable of learning, worthy to be trusted, and deserving the special advantages offered by the school."

Each applicant must, further, answer in writing such questions as these:

Are you really in earnest about going to school?

How much have you attended school?

Your age?

Are you willing to do good honest work in a cotton mill every other week in order to get to go to school every other week?

Do you promise faithful obedience to the rules of the school and of the mill?

Do you promise to stay as long as 12 months with the school, if possible?

Could you go to school without working your way?

What can you do in a mill?

Such questions are intended to aid the school authorities in making up their judgment as to whether or not to receive the applicant.

How the half-time scheme suits the mill operators.—Many might be skeptical on the question of how this half-time scheme works out in real practice. What is the verdict of the mill superintendent and his assistants in the matter? Is it possible for people working in pairs at the loom or the spindles—one of the two working this week and laying off the next when the team mate takes up the work—to do as good service as if the operative were on the job regularly from day to day? The answer is invariably in the affirmative. The investigator interviewed the president of the Saxon Mills and several superintendents and foremen in the various departments, and all declared the fullest satisfaction with the type of work done by the half-time students. The operators declared, furthermore, that the new education gives the student additional zest and zeal in proportion as his mental faculties are awakened. They can somehow make use of this to inspire in the mill operatives as a whole a new esprit de corps.

Statements like these coming from men in position to know are of vital importance. If investigation should have proved that the half-time workers were not so efficient as full-time workers, Mr. Camak's whole scheme would have failed. As it is, his fondest dreams seem fully realized.

The student in social leadership.—The managers of the mills are loud in their praise of the influence exerted by the half-time students on the religious and social atmosphere of the mill village. It is here that they get the first opportunity to show their true manhood and womanhood. One young man interviewed by the investigator had come out of the North Carolina hills some four years before, practically illiterate. He now holds a good place in the mill, is superintendent of the local Baptist Sunday School, and takes great interest in Young Men's Christian Association work and general welfare work.

A young woman who has been in school four years, having had, all told, less than nine months of schooling when she arrived at Saxon, is now preparing for Lander College. Her ambition is to become a settlement worker. She is a leader in local missionary work, active in general welfare work, and a leading Sunday-school teacher. It is hard to overestimate what the Textile Institute has done for such people as these and what they are doing in return for the religious and social welfare of the mill village.

Where the students go after leaving school.—An inquiry of the student body for 1915-16 resulted as follows:

- 10 per cent desired to become textile experts.
- 12 per cent desired to become ministers of the Gospel.
- 3 per cent desired to become teachers.
- 2 per cent desired to become foreign missionaries.
- 6 per cent desired to become social workers or home missionaries.

Fifty-eight per cent were already active Christian workers; 75 per cent wanted to help improve social conditions of mill operatives. The latter group included practically all the students at that time in school.

Four per cent of the students who have completed the school's course are in college. Seven in this 4 per cent are studying for the ministry, and three young women are preparing to become foreign missionaries. A few of the graduates have gone back to the farm and others are following a variety of pursuits, from civil service to barber trade; but three-fourths of all the students have returned to the mills, many from choice, others from necessity. Returning to the loom and workshop, the students carry with them new ideals for their less fortunate fellow operatives. They are instrumental, often, in helping their fellows to throw off the shackles of ignorance, with the assistance of the new school. Although the institute has been in operation less than six years, many of its product have already climbed well upward in the textile industries from ordinary "hand" to "section man" and even to the position of "mill boss."

The course of study and methods of instruction.—Student classification is necessarily very flexible, and recitation work individual rather than by groups, as they come to school with every degree of unpreparedness. Some students are practically illiterate, having had perhaps only a few weeks or months of public school instruction. Others are of mature years and some of them learn very slowly and others very rapidly. In exceptional cases students have completed the work of two or even three elementary grades in a single year. The elementary subjects form the background of the curriculum. These are taught in as practical a way as possible. Many students are obliged to begin with the primer; others are well along in the grades when they enter. Courses in elementary textiles are emphasized for the young men, and courses in home-making for the young women. The plan of work does not go above the eleventh year, this being the State requirement for high-school graduation in South Carolina. However, there is no attempt to build up, as the school authorities put it, a "proud curriculum," as the school's one great motive is to fit itself to the needs of its students.

Plans for the future.—The students of the Textile Institute pay nothing for tuition and lodging. The only charge is for board, and this is surprisingly small. Under the conditions, the institute must depend largely on voluntary contributions for its maintenance. This has been accomplished by means of scholarships and through direct donations from public-spirited men and women.

Testimony of students.—Many students, both at the school and in the mills, were interviewed and were asked to express their opinions and feelings in regard to the work the school has done for them. A

few of these testimonials are reproduced. The first two are excerpts from prize essays written by two students. The first is from the pen of William Glenn Smith, of Anderson, S. C., and the second is by Irma Wade, of Laurens, S. C.

William Glenn Smith writes:

I began work in a cotton mill at the age of 8, and have done little else. In those early days of toil, I used to see numbers of boys and girls passing to and from school, and my heart burned with the desire to go. Then, just as it seemed that I was about to have to enter life without even an elementary education, I heard of the Textile Industrial Institute, and my heart leaped with joy that at last I was to have the chance of buying with my own labor those privileges which should have been my childhood heritage. I had reached the age where even the thought of attending a graded school was humiliating to me.

As I recall the past four years that I have attended the Textile Industrial Institute and see the great opportunities that I have had and what I would have missed had I not come, I rejoice and thank God from the very depths of my heart for a great school like the Textile Industrial Institute. Though being a grown young man and starting at the bottom in books, I have come through the past four years in the Textile Industrial Institute without being humiliated or feeling embarrassed, simply because the students are all men and women studying together the common branches which they should have had when they were children.

I know many more who will seek to enter the institute as soon as they realize that here is at last a school where a grown young man may begin at the bottom without embarrassment and learn rapidly under the sympathetic guidance of living teachers, teachers whose only object seems to be to help folks that need help that they may help others.

We who work in the mills, and whose lives will be given in some way to the uplift of our fellows, realize deeply the meaning of such a school. Only those who know at first hand the serious handicaps of the rising mill boys, and at the same time the burning ambitions of many of them, can fully realize the future effects of the school.

It may be seen from the following why a mill boy needs a school like the Textile Institute.

Three young men from the graduating class last May entered college this fall. One of them will preach, and he expects the rest of his life to serve the mill people. Oh! I would to God that we had such schools as the Textile Industrial Institute in other parts of the United States.

A young woman who was an operative in the cloth room came to the institute, obtained enough education to return home and take charge of the cloth room as "overseer." Think of it! And she teaches a Sunday School class with 30 girls in it.

A man who is now attending the Textile Industrial Institute was "second hand" in the mill. But he lost his position because of his lack of literary training. He entered the institute, and he is now prepared to enter the mill again and take an "overseer's" position. But, the most beautiful thing of all, this man while a student in the Textile Industrial Institute has seen a vision; viz, that consecrated, Christian mill men can lead their operatives for right and righteousness.

Irma Wade writes:

The most important reason why the mill girls of to-day need an education is because they are to be the mothers of our next generation. They will have to

guide the footsteps of the boys and girls of to-morrow, and so much depends on their view of life. If the mother is narrow and has low ideals, her children are more than likely to be like her. If she is uneducated, she will not try to educate her children, because she can not realize the importance of it.

Most of the girls are needed and must help at home until it is too late for them to go to the public schools, and they have not the means to go to the other high-priced schools. Then, what are they to do? Where can they go to get the training they so much need? The problem was solved when the Textile Industrial Institute was established a few years ago. There the ambitious girl can go and earn her living and get an education at the same time. She is watched over, cared for, guided, and influenced by the best women. There she receives a regular high-school course which develops her mind, broadens her view, helps her to find and develop her natural talents and to appreciate the highest and best things.

Besides this, she is given a course in home making. She is taught not only how to prepare the food for her family, but also the value of the different foods and the foods which the body needs, so that she will know how to select the food which will do most toward making the members of her family strong, healthy, and happy, instead of feeding them canned goods and other things which are harmful and expensive.

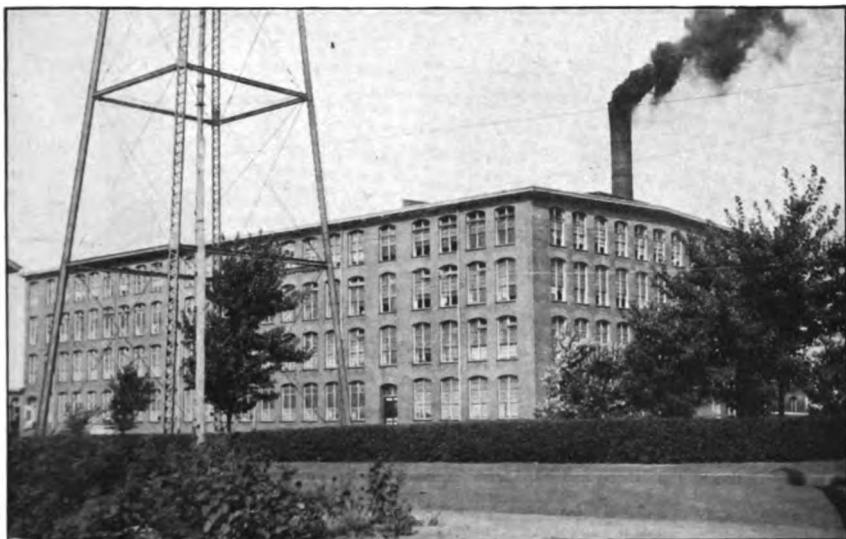
One of the greatest lessons taught there is the lesson of economy, which is learned from necessity. They work only half time, and are forced to live on half what they have been accustomed to have, often working early and late to do this. They, therefore, learn something of the value of money and learn to do without the things they do not really need. Because of this lesson, they will make more economical homemakers and their homes will be much happier.

Letters from former students of the institute.—The following extracts from letters written by former students further illustrate graphically what the half-time school can do for young people who have grown up under adverse circumstances, in sections where the school facilities have been bad, or the people too poor to take advantage of such schools as have been offered:

My father was an unsuccessful farmer of North Carolina. When the price of cotton became so low that he could no longer support his family he left the farm and moved to a cotton mill in South Carolina. A few months later he had a stroke of paralysis and died after two years of helplessness, leaving my mother with nothing except a houseful of children.

I was then 8 years old. Mother managed to keep me in school until I was 11. By that time all my older brothers and sisters were married except one brother 13 years old, who was working in the spinning room for 40 cents a day. There were two children younger than I, so it was, of course, necessary for me to go to work. I had just completed the third grade and was very anxious to go on to school, but I realized the need at home and was glad that there was a way for me to help. Mother tried to get us into an orphan's home, but there was no room for us. She bought a cow and by sometimes keeping boarders we were able to live.

After a few years my brother and I were making fairly good wages and decided to take it time about and go to school. He went one winter. I started the next fall, but was called home before the session was out. I was naturally of a studious nature, and it was a blow when I realized that there was to be no more school for me. I do not remember the time when I did not want an education more than anything else, and this desire grew as I grew older and came to



A. SAXON MILLS, IN WHICH MANY OF THE PUPILS WORK.



B. A CLASS IN TEXTILES AT THE SAXON MILLS.

At the conclusion of lectures at the school the pupils often go to the mill for practical demonstration.



THE STUDENTS OF 1914.

realize the need of it more. When I was still a child my pastor and his wife would often give me magazines, and I soon became a passionate reader. But I had no one to direct my reading and no one to help and encourage in the studies that I might have taken at night. Consequently, I spent most of the hours when not at work reading whatever fell into my hand, and it was often that which was not good for me. But I did receive a great deal of good. I received encouragement, inspiration, ambition, and learned to think through the things I read.

I became a Christian and joined the church when I was 12 years old. My successive pastors took an interest in me and I became very much interested in the church work. It was a small mill church. The pastors were earnest, consecrated men, but they had little help and had to divide their time between three other churches. We had no leaders of ability, seldom had an organist or anyone to lead the singing and but few teachers who could interest a Sunday-school class. So it was no wonder that the church was weak and seemingly did little good. For lack of a better teacher I was given a Sunday-school class when I was 16. I met them every Sunday but did little good unless it was to set them an example of faithfulness. I realized that many others as well as myself were unfitted for the places they held, but there was no one else to take them who could do any better. It was then that I began to see how much the cotton-mill people needed education and educated leaders. I saw that they were not getting out of life what was due them. They did not know how to spend the money they earned, to make themselves and their homes attractive, to care for their babies or to keep their communities in a sanitary condition. More than that, they did not know how to enjoy their leisure time. Of course their lives were dull; with many it was simply the drudgery of making a living.

I believed that this state could and should be altered. I loved them; they were my friends and neighbors, and in my heart there was born a desire to help them. But what could I do? I knew little more about how things ought to be than they; besides, my older brother had contracted consumption, and it was all I could do to care for him and provide for my own home. This continued until I was 24 years old. Then my brother died, and other changes took place that made it possible for me to get away from home. I began to look around to see what I could do. Going to school seemed impossible. I had no money; I had passed the public-school age, and the thought of entering school and having to start in the lower grades was embarrassing to me. Yet I knew I could do nothing worth while until I did get more education. These thoughts haunted me until I was on the verge of despair. Of course, I prayed and believed that God would in some way direct my life, but little dreamed that He would lead me in the paths that He has.

I went to church one morning with an unusually heavy heart. After the sermon a young man whom I had known in the mill arose and asked permission to speak. He told about a school that had been established in Spartanburg for the benefit of the young men and women who were ambitious enough to work for an education. He was then a student there, and as he went on to explain the plan on which it was run tears of joy sprang to my eyes. I knew at once that that was the chance for me. Before he had finished speaking my mind was made up and in less than two weeks I was a student at the Textile Industrial Institute.

I arrived on Saturday afternoon. I was assigned work in the classroom on Monday and attended my classes all that week. The next week I went to the mill where work had been arranged for me. The work was hard and the pay was disappointing. I found that I could only make enough working half time

to pay my board. But fortunately I had clothes enough to last for a while and by doing my own laundry I was able to pay my expenses. I had to sacrifice some things that were very dear to me when I went, and the first few months were hard, because I had so many adjustments to make; but still I think they were the happiest months of my life. I knew that God had answered the longings of my heart. My dreams were coming true, and I saw larger fields and a richer life opening up before me. I found myself among a set of honest, sincere young people with much the same ideals and ambitions as my own. Some were older than I, and many were not as far advanced, but we all understood all were working for the same purpose, and we were bound by a tie of love and sympathy seldom found outside the family circle. I soon learned that the majority were not working only for themselves, but that they might get something to carry back into their home communities. With such a spirit combined with the influence of the Christian men and women who were there to help us, we could not help but be inspired to do our best.

I took some eighth-grade subjects that year, in others I was as low as the fifth grade. Though I entered late my teachers saw that I was in earnest and spared no pains in helping me. With their help I soon caught up with all my classes and covered enough ground that year that I was able to take all the tenth-grade work the next year, thus finishing the course in two years. Although I had not been higher than the fourth grade in school, I had learned enough through my reading that I was able to take higher-grade work in some subjects. In others I doubled, doing two or three years' work in one.

Before I finished there I had made up my mind to go back into the mill villages and teach. I chose this work because I felt that I could do more good in that way than any other. My problem then was how I was to continue my education after leaving there. For some time this worried me, but again I felt God's leading hand. Through one of my teachers I secured a scholarship at the Normal and Collegiate Institute in Asheville, N. C., where, by doing house work for a portion of each day, I could get my board and tuition. I entered the Normal last September, just a few weeks after leaving the Textile Industrial Institute. I am taking a teacher's training course which it will take me two years to complete. I expect to continue my preparation as long as possible; then I hope to find some place where I can pass on the blessings which I have received * * *.

Some think there will be no need of such a school as the Textile Institute after a few years, now that we have compulsory education and the children will have a chance to go to school. I believe that will only create a greater need for it. The children will get enough from these public schools to interest them and cause them to see the value of an education. The lack of this interest has kept many away who might have gone to school. Then, instead of having to give much time to the primary work, it may be given to the higher grades and to the home making, gardening, and textile courses which the people need above all else.

I saw an advertisement in a paper that there was a school at Spartanburg, S. C., where I could go to school half of the time and work the other half. I said it was the place for me. But I thought I would come and investigate and see if it was even so, and I will say that I found it to my surprise the greatest place I ever saw, so I moved my family to the mill village and started to school, myself one week and my oldest boy goes the other week. We take it time about going. While I am at work he is in school, and I go to school the other week and he works. I have three children in the public school here in the village, so I am going to see to it that by the help of the Lord my children are not as I am.

We have been going to school at the Textile Industrial Institute for about seven months, and it just seems like home to us. I think the best teachers in the world are at the Textile Industrial Institute. I am 35 years old and I hope to get through here in about three years.

I went to work in the mill when I was 9 years old. I went to school only one session before I went to work. The lack of opportunities was due to the fact that my father needed my help in order to support the family. I know the Textile Industrial Institute offers splendid opportunities for men like myself. I entered about the fourth grade when I came to the institute. I hardly knew what English grammar was and was a beginner when I started. I had only been to school 12 months in my life. I am in line for promotion in the mill and am connected with religious and social activities of the community. I was 24 years old when I entered the institute and finished the tenth grade when I was 27.

From my earliest recollection I had but two advantages, that of Christian parentage, and ambition. My ambition was curbed and almost killed by the awful poverty which I had to endure. This robbed me of the carefree days of childhood. As early as in my seventh year I had to assume the responsibility of helping to keep the wolf from the door. We lived in a rural district only one mile from school, but I never had the opportunity of attending more than three months each year. The little time I did attend, however, I applied myself diligently. Many nights I studied until midnight and then arose before daylight in order to spend another hour with my books.

Year after year passed in the same monotonous manner. I realized that I was almost a young woman. Others of my age, and even younger, went away to good schools and came back greatly improved. I do not know myself how I ever endured the pangs which my heart was forced to endure. Yet somehow I was never completely in the clutches of despair. I always imagined that I could see a ray of hope just ahead. I puzzled my brain no little to map out some way for self improvement. Many times did I steal away and cry my young heart almost out and pray the best I knew how for some way to be opened for me. Many nights have I sobbed on my pillow until sleep came through sheer exhaustion. Thus passed the first 18 summers of my life.

After much persuasion my people consented to move to a cotton mill. I thought I could save enough money in one year to go to school the next. We found the mill people to be big-hearted, good neighbors. We received many kindnesses from both overseers and operatives. I soon learned to weave and I made very good wages. Yet I still found it hard to save much, after I paid my board and bought my clothes and met the little incidentals which naturally came up. During the second year of mill work I donated my small hoard to my sister to help her in school. This I did willingly, yet it was a case of "robbing Peter to pay Paul." I was growing despondent concerning my own case.

One day I read something about the Textile Industrial Institute. I fairly hugged the piece to my heart. From then on I watched every paper and read every word eagerly. I always felt that each piece was written for me especially. It was hard to believe all I read and heard. It seemed too good to be true. I made up my mind to go, if I could get admission. I decided that to be in school every other week was better by far than never to go. I went in person to apply. How grateful I felt when told that they would make room for me. The principal told me frankly that I would find it hard. I did; yet the very difficulty of the undertaking made it seem of more value to me. The struggle was made bearable by victory. The school was like a home. When

we gathered around the table or in the classroom, we felt like one big family. There was an influence for good everywhere and in everything. * * * I know that the improvement in my narrow life was not so noticeable to others, yet I realized it fully. I learned many things outside my books. I learned many rules of etiquette, and something of plain sewing and plain cooking and food values. It was surprising how rapidly a student could advance, although in school only every other week.

I landed at the Textile Industrial Institute 23 years of age, and had been to school only a few months. Of course I had to start almost at the bottom. I started in the fourth grade and worked in the cotton mill every other week to pay my expenses, and completed the eighth grade within two years. I was a country boy and knew nothing about millwork. This was a little disadvantage, but I soon learned to cover rollers, and it paid me \$1.10 a day, which enabled me to remain in school. Before going to the Textile Industrial Institute I, as every other countryman who does not know the mill people, thought they were degenerate and not worth bothering with, but when I came to the Textile Industrial Institute and began to associate with the young men and women of the school I soon saw that I had been misinformed. I found that there were some of the brightest minds, best hearts, and finest characters among the mill people. By working and studying with the struggling men and women at the Textile Industrial Institute they commanded my utmost respect and love, and in a very short time we came to be most intimate friends.

The institute is the place where the moral, religious, industrial, and social leaders are found, trained, and given a chance to express their lives in service for others.

I spent two years at the Textile Industrial Institute, after which I entered Mars Hill College, Mars Hill, N. C. Had it not been for the Textile Industrial Institute, I, with all the young men and women which it has blessed, would have remained illiterate.

I heard of the Textile Industrial Institute at Spartanburg, S. C. I was in Charlotte, N. C., at that time. I heard of the advantages it offered poor boys and girls who wanted an education and were willing to work for it. Here was my opportunity. I grasped it. I had no money and could do nothing but weave, but the principal told me that was all I needed. I knew I could weave; I was willing to work; so I went at it. This was my only chance, weave and study at the same time. I remained in the Textile Industrial Institute two years and graduated in May, 1915, with the first class it ever sent out.

While still a student I heard the still small voice calling me to go back to the cotton mill communities of South Carolina and there give my life in service to the mill people as a preacher, and help them to a higher plane of living and a better understanding of citizenship. I knew I needed more education and more training for this great work, and I wanted to go to college to get it.

I came to Furman University in the fall of 1915 with about \$9 in money in my pocket to enter college. I had no idea where I would get the money to pay my college expenses or where I would get any work to help defray them. I asked the board of ministerial education for some help, and they granted it. I then got a job to deliver papers for a few hours in the afternoons. From these two sources and what little I could borrow I managed to stay in college the first year. I came back in September of 1916, and by struggling hard again I shall be able to complete my second year's work in college.

Time and space would fall me to tell of what I think of the Textile Industrial Institute as a means by which the worthy young people of our cotton mills in

the South may climb to positions in the mill and the professions where they may be of immense value to their local communities. The institute was a stepping stone to college and to larger things for me. It has been the same to some half dozen others who are now pursuing their studies in other institutions of higher learning. From personal knowledge I know that these students are going back to the cotton mills from which they came, some to preach, some to teach, and some as social workers. Many others who have not had an opportunity to go to college have gone back as laborers in the mill itself and are fast working up to places of honor and trust, while at the same time making a power for good as leaders in the church and community.

Now we may ask ourselves this question, What is going to be the social effect of this sort of thing? I can answer it in a few words. It is going to mean the salvation of the best class of working people in the whole South, lifting them out of the quagmires of illiteracy and placing them where they belong, on a high plane of living and thinking, with a clear knowledge of their duty to the community, to the church, to the State, and to our country.

Additional testimony from students.—The following excerpts from letters and personal conferences with students shed further light on how they view the work of the half-time school:

I am 29 years of age. I was reared in the mountains of North Carolina, where I managed to get about 11 months of schooling. When I came to the textile institute, I could read a little. In the short time I have been here I have worked through the fourth, fifth, sixth, and seventh grades of work. I am studying English, mathematics, geography, and United States history at this time. It has been slow work for me, but I am doing well. You may be interested to know that I have managed on the side to help support my mother and the children at home. I am superintendent of the local Baptist Sunday school.

I am 19 years of age. I came to the institute in 1913. My early preparation was fair as I had attended elementary school for five years. In the 2½ years that I have been in the institute, I have learned rapidly, having just finished the tenth grade. I am working as "section man" in the Saxon Mill. I draw \$1.80 a day. On the outside I am assistant to the village welfare worker. I love the work.

I was born in the hills of Georgia, coming from a large family, where the children had to shift for themselves. The best I could do at home was to get altogether nine months in public school and night school. I succeeded finally in getting away, coming to the textile institute where I have just completed the eleventh grade of work. It is my hope to work along and earn enough in the mill to go away to college. I expect to make settlement work my life work. I am interested in Sunday school work, where I have a class. I am also doing a little home mission work and am one of the assistants in the settlement work here now.

I worked up in the mill as high as I could go without a better education. Having almost lost hope of going to school any more, I worked on in this way until the future seemed almost a blank. It was then that I heard of the textile institute. I am here now that I may get an education and be able to do good work and help others as well as myself. My aim is to prepare for mill work and to help those in the mill communities who can not help themselves. My wife and I have been in the mills here three years. We both go

to school one week and work one week. My wife is about two years ahead of me in the books.

When at the age of 12 I took a position in the Anderson Cotton Mill to earn my living, as my parents were dead, I had no one to help me from that age until now, and I had to support myself and never had the privilege to go to school. But never did I cease to pray for a way to be opened to me, and it seems to me, ever since I heard of the Textile Industrial Institute, it came as an answer to my prayer. As long as I stay here it will be a good home and, as you know, it is a bad thing for a girl to be without a home.

III. SUMMARY AND CONCLUSIONS.

It has been shown in the foregoing paragraphs that the average mill school at its best can do little more than provide a fair degree of instruction in the rudiments of an elementary school education for the youngest children. Very few complete the elementary school course, as most of the children are for one reason or another retarded in their class work and go to work in the mills as soon as the child-labor age limit is reached. Very few of the mill-town population ever enter high school. The few who are so fortunate as to complete the elementary school course, and whose parents are able and disposed to have them continue work in high school, must seek such instruction elsewhere.

Then there is the large class of operatives to be considered who enter the mills from the outside—from the hill and mountain sections of the South, where living conditions are hard and educational facilities meager. Many of these youths begin their work in the mills almost wholly illiterate. How best to plan for the education of this class and the large number of children schooled in the mill village on a limited educational fare is the problem of the mill community.

There are now about 1,025 textile mills scattered over 12 Southern States. These mills employ many thousands of operatives, and around them have sprung up villages or city suburbs, as the case may be, where the wives and children and relatives of these operatives dwell. All together this comprises the population of hundreds of thousands of persons. It should be borne in mind, too, that these industrial places are of recent origin and have come much as an accretion to the well-fixed rural and urban establishments of the South, and have therefore not yet received the fullest educational consideration. The mill-town schools require special treatment.

1. Because of people's general illiteracy and their want of education traditions;
2. Because their poverty requires them to get to work in the mills as early as the law will permit; and
3. Because most of them have recently been transplanted from agricultural to industrial life.

These people need an education preparing them specifically for the broadest social efficiency, and for the industrial occupations peculiar to southern cotton spinning. To this end it would be well to recommend:

1. Special State legislation in each of the Southern States where this problem is acute, with provisions for the careful organization, administration, and supervision of the mill schools in charge of special State officers working under the several State departments.

2. Encouragement of the part-time school, which has already been successfully demonstrated in the Textile Industrial Institute at Spartanburg.

3. Provision for the establishment of such part-time schools as public schools, considered as part of the public-school system.

4. Organization of these schools to meet the requirements of the Smith-Hughes Act for Federal aid to schools of this type.

5. Special provision for the establishment of continuation school classes for the adult operatives under State and Federal cooperation.



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RURAL EDUCATION

By

H. W. FOGHT

SPECIALIST IN RURAL SCHOOL PRACTICE
BUREAU OF EDUCATION

[Advance Sheets from the Biennial Survey of Education
in the United States, 1916-1918]



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RURAL EDUCATION.

By H. W. FOGHT,
Specialist in Rural School Practices.

CONTENTS.—Introductory—Administration and supervision of rural schools—Increased financial support for the rural schools—Teachers' salaries—Organization of the rural schools—Growth in rural high schools—Vocational education and the Smith-Hughes Act—The rural school course of study—Status of teachers for the rural schools—National Rural Teachers' Reading Circle—Commissions and committees organized for the advancement of rural education and life—Rural-school surveys—Publications on rural education of the Bureau of Education.

INTRODUCTORY.

Rural education and the war emergency.—The war has served to accentuate many marked weaknesses in our rural school system. For years devoted leaders in this important educational field have carried forward a propaganda to enlist local and national interest in the matter, and not altogether without success. In many sections of the country splendid schools have been organized that fit into every requirement of modern agricultural communities. Whole States are going through the process of reorganizing the primitive one-room schools for effective rural leadership; but, unfortunately, it can not be said that this movement has yet gone far enough to affect rural education fundamentally for the Nation as a whole.

The annual reports of the Commissioner of Education disclose that about one-half of the Nation's children are enrolled in the village and open-country schools. These twelve million children are laboring under distinct educational disadvantages. So far as the open-country schools are concerned, fully two hundred thousand of these schools may still be classed as one-room schools of pioneer type, which but poorly meet the needs of modern agricultural life. Their teachers are largely immature, inexperienced, poorly trained, and of limited vision of rural needs and problems. The school year is much shorter than it ought to be, enrollment of school population is in many States low, daily attendance is often irregular, and compulsory-attendance laws are not always enforced as they should be. The course of study in the small schools is often badly planned and the subjects poorly taught, and financially they are meagerly supported in comparison with what is invested in education elsewhere. Recent educational surveys have disclosed that in certain States the level of school education must be measured by about six and one-half years

of school attendance for the villages and less than five years for the rural districts. Such limited education can not furnish the intelligent leadership required at this present time of entrance upon the new era of scientific agriculture.

A general reconstruction of rural education likely.—The world war brought home to the general public what educators have long known, that there are in the United States between five and a half and six million illiterate adults, and that more than one-half of these people live in rural sections where there are little or no school facilities. Likewise, there is a public realization that a large proportion of the ill-taught millions of aliens live in rural communities, left there largely to their own resources and inclinations in educational matters. In many States they are grouped in large settlements speaking foreign tongues and using their native language as a medium of instruction in the schools. This has delayed the assimilation process and has been at the root of many un-American practices disclosed by the war.

The war emergency, therefore, found rural education poorly organized to cope with the serious problems of war and the period of reconstruction that will follow the war. The period of isolation in American rural life is gone, and the period of international commercial agriculture is at hand. This demands an organized agricultural life based on the right type of educated leadership, and this can come only through the best kind of rural school education. The returning soldiers who have dealt with large issues, and others who have been drawn into great measures of industrial efficiency for war and peace, will not be content to go back to the old ways in rural communities. What is more, the women who have remained at home have in a measure stood still educationally while the men have grown. They also need the vitalizing influence of a new, much-embracing education.

Federal aid for rural education.—The problem of education in rural communities has attained too vast a magnitude to be left entirely to local and sectional control. The war emergency attracted many of the best teachers into Government activities; the draft called many of the men teachers to their country's standard. This left the rural schools shorthanded and manned largely by inexperienced teachers. To remedy these serious conditions is too much for the ordinary locality. It is a matter for national consideration. As it is national in scope, it requires national aid for satisfactory solution. Federal cooperation and financial aid for the development of rural education might well be extended to the several States on the basis of real merit, to include the following:

1. All-year schools organized to meet the needs of all the people, young and old alike.

2. Teachers of good academic and professional preparation and broad teaching experience.

3. Teaching process preparing the people to meet their responsibilities and opportunities of citizenship and helping them make a good living from the land.

ADMINISTRATION AND SUPERVISION OF RURAL SCHOOLS.

Progress in the administration of rural schools.—School organization in the United States has developed from the needs of community life in the different sections of the country. In pioneer days school organization was wholly a community enterprise, each group of families organizing and supporting its own school as best it could. From these often far-separated group centers, school organization began as an outward development, coinciding as a rule ultimately with the geographical unit established for civil administration. Historically this has given the country three distinct types of school organization—district, town (township), and county.

The district, which was the original pioneer organization, still prevails in many sections of the country, chiefly in the Middle West and West. The town organization is the basis for school administration in all of New England, Pennsylvania, Indiana, and parts of Michigan, Iowa, and South Dakota. The county unit has prevailed from the first in the South and has more recently been extended in some form to several Middle Western and Western States.

The district unit, which in the early days was the only kind of organization possible, has largely outlived its usefulness as a unit of school organization and administration. Unquestionably it is the cause of much of the inefficient and ineffective schools to be found in many sections. In the States organized on the district basis the prevailing tendency is toward the county unit, which, if rightly organized, offers a large enough area for the introduction of equitable taxation and equalized educational opportunities.

However, the county unit must be planned to allow patrons of the schools a certain amount of local initiative and responsibility or it will fail because of too much central control, as the district unit has failed because of too much local control. Several States that are organized on the county basis have placed all educational matters, including taxation, in the hands of the single county board of education, leaving the local school communities without any direct representation or right to levy local taxes. This has proved an unfortunate practice in many places. The best plan appears to be to retain a representative for each school community who shall represent the needs of his own school before the county board. Likewise, while the county should properly be the unit for general taxation for ordi-

nary school maintenance, every local school community should have the right of taxation for extraordinary purposes, such as improving its school plant, buying sites and lands for agricultural experimentation, increasing teachers' salaries above the county maximum, etc.

At the present time 19 States are organized wholly or in part on the county unit basis for school administration. Of these Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, North Carolina, Tennessee, Utah, and New Mexico may be classed as of the pure county type; that is, in which practically the entire management of the schools rests with the county board of education, with such local assistance as has proved most advantageous. New Mexico is the last State to adopt the county unit. In 1915 the State legislature passed a county unit bill for tax purposes, and the legislature of 1917 made the county the unit for all administrative purposes as well. Says State Supt. J. Howard Wagner, speaking of the success of the new plan:

We now have the county board of education, which has charge of all the schools in the county. This is proving a wise provision, as it centralizes the administration of the county schools. It has already stopped all financial leaks, and better qualified teachers are being employed. It is a great deal more economical than the old system, as all counties are required to work under the budget system.

Professional supervision of rural schools.—The teachers of the open county, whose problems are assuredly the most perplexing in the whole field of education, have suffered for want of expert professional supervision. If many have failed to achieve success, it has been, in large measure, because they have not had that close and expert guidance commonly found in large town and city schools. The whole plan of organization has been at fault, or perhaps, more correctly, circumstances beyond public control have conspired to make conditions what they are. Rural-school supervision in many States has been limited to incidental inspection. The newness of the country, the rapid westward expansion, and other transitions in rural life explain prevailing conditions; but the schools of the new era of scientific agriculture demand more than this perfunctory inspection. System is needed. There must be organization and leadership. This is particularly true at the present time when teachers' tasks are becoming greatly multiplied. The many war duties and the after-war reorganization require of the teachers real community leadership. To give them the necessary help there must be created a staff of school supervisors, both local and State, in addition to the county and district superintendents, who must continue to devote much of their time to office practice and mere school inspection.

Some real progress is being made in many States in professional supervision. In some there are expert supervisors working under

the direction of the county and district superintendents. In others there are the so-called "helping teachers," or "supervising teachers." Many State departments of education have added to the regular staff men and women who devote all their time to directing the work of the local supervisors. This is bearing good fruit.

Washington.—This State has organized its State department of education for the purpose of extending more effective help to rural life and education. There are now in the department one expert in rural education who devotes his entire time to work with the county superintendents, one community center organizer who plans the organization of rural communities with the school and teachers' home as center. There is also a State rural life commission centered in the department of education, and a boys' and girls' club worker who cooperates with the representatives of the Federal Government for the promotion of school and home projects.

Maryland.—Provision has been made for the appointment of elementary school supervisors in such a way that each county with 100 teachers or more must have at least one specially trained school supervisor in addition to the county superintendent, the attendance officer, and the statistical clerk. The first of these supervisors in each county shall under law have charge of the rural schools.

Kentucky.—This State has recently introduced professional supervision for both white and colored schools. At the present time 32 white supervisors are engaged in 24 counties. Eighteen colored supervisors likewise are at work in as many counties, where they are maintained by the General Education Board and the Jeanes Board. The latter devote practically all their time to supervision of vocational subjects.

West Virginia.—This State, which was one of the first to subdivide its counties for supervision purposes, has as many as four supervisors in certain counties. Good progress is reported.

Vermont.—Three years ago a law was enacted making provision for State-wide supervision of schools. All superintendents are now appointed and paid by the State board of education. The average salary of these superintendents during the past year has been about \$1,800, with an allowance of \$125 for expenses.

Montana.—This State is making good progress in school administration and supervision. Speaking on this subject, State Supt. May Trumper says:

The administration of the rural schools in Montana has been greatly improved because of the fact that we now have two rural school supervisors working in very close cooperation with the county superintendents. During the past year our rural school supervisors had visited practically all counties two times. They have held many community meetings, at which times many problems dealing with administration of rural schools have been discussed with trustees, county superintendents, and teachers.

Professional supervision typified in Jefferson County, Ala.—This county may be taken as typical of the best organization to attain professional supervision of schools and teachers. The plan is summarized in the following statement:

1. Subdivision of the county into 11 districts containing about 18 schools each. In charge of each of these districts is a supervising principal who devotes his entire time to supervision. He travels among the schools, directs teachers' meetings, reading circle work, makes requisitions for his supplies, conducts sample lessons, acts as critic teacher, etc. These supervisors made 6,605 visits last year.
2. An assistant superintendent is placed in charge of the department known as "Teacher Training in Service." He has meetings with his teachers on Saturdays, selects reading matter for them, has charge of the reading circle work for the county, assists in the employment of teachers, and determining the standard for employment.
3. The professional requirements have been increased until now it is necessary for one employed to teach in this county to hold a normal-school diploma or its equivalent, or, in lieu of this, a high-school diploma with two years' successful experience elsewhere.
4. There are 12 consolidation schools, to which pupils are conveyed at public expense. There are also about 40 union schools; that is, schools made by the consolidation of two smaller schools, but without transportation. Of the 130 white schools, only 28 are one-teacher schools; of the 75 colored schools, only 35 are one-teacher schools.
5. During the year 64 night schools were conducted in rural districts for six weeks, using the teachers employed in day work, these teachers being paid at public expense; 1,230 pupils were enrolled in the high schools, 297 of these being illiterates, and 457 near-illiterates, as it was necessary for them to begin with the primer.
6. The county has two agricultural instructors under Smith-Hughes work, with a salary of \$2,400 each.
7. Four new eight-room consolidated schools have been built during the year, three of these being on the one-story extensible-unit plan. Fifteen other buildings have been remodeled or enlarged. Five acres of ground are required for each of these new buildings.

INCREASED FINANCIAL SUPPORT FOR THE RURAL SCHOOLS.

The most serious problem confronting the rural schools at this time of excessively high costs is financial. If rural children are to get opportunities for education equivalent to those afforded city children, much more money must be expended for their education than has been done in the past. Not alone is less money being expended, child for child, in rural communities than in the industrial places, but if rural children are to get this equal advantage, even more money must be expended than is now being invested on the education of city children, for the reason that education in rural communities will always be more expensive than in the larger schools in organized centers. In rural districts with the many school plants, the ratio of teachers to pupils will always continue larger than in the

cities. The upkeep, fuel, etc., cost more in the rural schools. Transportation facilities have to be provided and teachers' salaries increased if good teachers are to be obtained. In some sections rural teachers are beginning to be paid more than teachers of the grade schools, in order to keep them in the country schools at all.

There is urgent need for serious readjustment in the prevailing methods of school taxation. So long as schools are supported chiefly through local taxation it will be difficult to obtain funds required to give rural children the advantages equal to those enjoyed by city children. The country needs progressive legislation in this field. State, county, and local taxation should be resorted to. It is eminently fair that the State as a whole be taxed for the education of all of its citizens. This rate of taxation should not exceed in any case more than one-third of the entire school maintenance of the State and be distributed among the schools as an award of merit. The county may properly bear the main burden of taxation, this to be used for such general school maintenance as teachers' salary, upkeep of school property, etc., and should be apportioned on the basis of aggregate daily attendance and the number of teachers employed. Finally, the local school community should retain the right of levying taxes for extraordinary purposes, otherwise local initiative might die for want of proper stimulus.

Increased State appropriations for the schools.—Practically all of the States that make use of State taxation for school purposes have been obliged recently to increase their levies greatly, and counties and local communities have followed suit in order to maintain the schools at the present standards of efficiency. Maryland reports its State appropriation for public schools increased in 1918 from \$1,750,000 to \$2,000,000. In addition to this, bonuses ranging from \$50 to \$100 are being paid teachers who remain in their schools throughout the year. North Dakota has increased the amount of State aid for standardization and consolidation of rural schools from \$120,000 to \$225,000. Other States are doing as much or more than these.

TEACHERS' SALARIES.

Public school teaching is the poorest paid of all professions, if the time and cost of professional preparation are taken into consideration. Because of this the American teacher is transient and of short tenure. Many teachers, unfortunately, make the calling a stepping stone to other life callings. At the present time, with its unprecedented opportunities in industrial activities, a serious exodus from the profession is threatened. Indeed, many teachers, particularly rural teachers, have already abandoned teaching for other activities. (See

the chapter on Preparation of Public School Teachers, Biennial Survey of Education, 1916-1918.) Many States, in their efforts to stop the exodus, have taken steps to increase their teachers' salaries liberally, although even larger increases will be necessary to keep the best men and women in the schools. The following are some of the increases in salary lists reported to the bureau for the year 1918:

Maine.—Salaries increased about 25 per cent.

Montana.—Very few schools pay less than \$70 per month in rural communities. Most of the schools range from \$85 to \$100 per month or more for experienced teachers.

Maryland.—The legislature of 1918 increased the minimum salary for high-school teachers from \$600 to \$800 for the different kinds of certificates. White elementary-school teachers of three, five, and eight years' experience will receive salary increases based on kind of certificate and length of experience, as follows:

Salaries of elementary-school teachers.

Grade of certificate.	Beginning teachers.	Three years' experience.	Five years' experience.	Eight years' experience.
Third.....	\$400	\$425	\$450	\$475
Second.....	450	475	500	525
First.....	500	525	550	580
Principal.....	550	575	600	650

Kentucky.—A law has recently been passed placing the minimum salary for teachers of the second class at \$45, and of the first class at \$55.

Pennsylvania.—The following minimum salaries have been adopted: Provisional certificate, \$45 per month; professional and normal-school certificate, \$55 per month; permanent certificate, \$80 per month. The salaries of teachers in rural community vocational schools have risen steadily. Principals of vocational high schools receive from \$1,200 to \$1,800, teachers of agriculture from \$1,200 to \$2,000. Vocational supervisors and home-economics teachers receive \$100 per month, and other teachers of this type of rural school from \$75 to \$125 per month.

Washington.—Increases in teachers' salaries for 1918 range from 15 to 20 per cent. Teachers are generally being engaged by the year instead of for a nine months' period.

Wyoming.—Salaries of rural teachers range as a minimum from \$70 to \$90 per month and as a maximum from \$100 to \$125 per month.

Vermont.—There has been an increase the past year of about 12 per cent in the salaries of rural-school teachers. These teachers are now almost invariably employed by the year.

ORGANIZATION OF THE RURAL SCHOOLS.

Improvement of one-teacher schools where centralization is impracticable.—There are probably 212,000 schools of the one-teacher type still in use in rural communities, the only means of education open to the large majority of rural children. It is now accepted as good national policy to reorganize the small schools to meet the needs of the new era of commercial agriculture. Many of these schools can never be converted into large centralized schools for topographical and other reasons. In broken mountain districts or in sections of the country cut by streams and ragged coast lines, or in sparsely settled regions, such reorganization is seldom feasible and should not be urged. If, on the other hand, these natural obstacles do not exist, the centralization movement should be championed rationally and emphatically. The changing conditions leading to modern country life have proved utterly beyond the abilities of the small one-teacher school. Nowadays it is necessary to charge the school with a multitude of responsibilities which formerly devolved on the home. Only where there are exceptional teachers in charge of the small school can this become a truly community school. In many instances it fails in the larger purpose and remains an institution furnishing at best a meager measure of the fundamental subjects.

Reasonable standards.—For the future it would seem that a really effective one-teacher school should be standardized around such educational essentials as these:

1. A teacher with specialized preparation and willingness to make rural community teaching his permanent occupation.
2. A school plant organized on the all-year plan, equipped to provide an education fully related to rural life and its needs.
3. A course of instruction and methods of teaching in accord with the needs and nature of agricultural people.

Looking toward the all-year school.—The new standard requires, first of all, a teacher who has preferably had his professional training in one of the special schools for rural teachers, a person of rural mind and in love with rural life, who understands its difficult problems. He must be hired by the year, living at the school in a home provided by the community. The school premises should contain 5 acres or more of land, preferably more. The school building should be planned with full equipment for experimental agriculture and gardening, home economics, and manual training. There should also be ample room for community rallies. The chief departure in the new school plant is the teacher's cottage.

Some real progress has been made the last few years in the construction of homes in connection with such schools as these. The State of Washington reports 196 teachers' cottages erected and many

others underway. Many of these form a part of the one-teacher school plants, while others are erected at the consolidated schools. Wyoming reports that many cottages have been erected during the past year. Texas now counts upward of 200 cottages, and several other States are accomplishing almost as much. All-year schools of this type would hold out real inducements to strong married teachers to take charge of the schools and would make it quite possible for the teacher to conduct many outdoor activities of the school during the summer months.

A better type of school consolidation.—It is probably safe to say that the period of experimentation in school consolidation has passed. The movement has now been accepted as good national policy. The important thing at the present time is to see that school consolidation shall come in its best form. Otherwise, little will be gained by displacing the old type of education. There are about 10,500 consolidated schools in the United States in 1918. These are schools with two or more teachers, resulting from the centralization of two or more schools, providing facilities of the graded-school type. The most satisfactory type of consolidated school is planned to give the rural community just the kind of education required by an agricultural population. Broadly cultural and yet practical; preparing them for happy, wholesome, remunerative living on the land. Many of the early consolidated schools were planned as big graded schools offering courses of study in no wise adapted to the needs of rural districts. The new schools are organized with a view to preparing for the new agricultural era a permanent farming population of highest ideals. The last two years have witnessed the organization of many exceptional schools of this type. The brief statement of the Sargent Consolidated School in Colorado which follows is typical of what is being accomplished in many States:

The Sargent Consolidated School, a Colorado county life institution.—It takes time to complete such a school plant as that of the Sargent Consolidated School, and it was not until January, 1918, that the new building was occupied, being then unfinished. It was dedicated and christened April 23, at which time 50 autos were parked on the grounds and more than 500 enthusiastic country people were packed into the large school and community auditorium to witness the event to which they had looked forward with so much pleasure.

This fine modern \$35,000 school building was scarcely finished when another bond issue for \$18,000 was voted. With this an 8-room building is being erected to serve as a home for the superintendent. The contract is also let for a 10-room teacherage for the other eight teachers, and the plans are drawn and approved for a garage, 40 by 70 feet, with a gymnasium in the basement.

In this most modern and up-to-date rural school plant \$53,000 has already been expended or contracted for. These people have not only provided for the present, but have anticipated their future needs for years to come. The building itself is complete in every detail. It is a beautiful structure, well designed for all the lines of work that should be carried on in a modern rural

school. It has standard classrooms sufficient to accommodate 500 children. It has a large school and community auditorium for both school and neighborhood meetings. It has well-equipped agricultural and domestic science laboratories, and a manual-training shop, these three lines of work being introduced the first year. Thirty boys, each of whom owns a registered gilt, have organized a pig club. Already pigpens and chicken coops dot the rear of the 10-acre school site. A gasoline engine furnishes water under pressure for drinking fountains, lavatories, and toilets, and generates electricity for lighting the building, as well as for charging the storage batteries of the auto busses used in transportation. It is still further utilized as laboratory equipment in the study of electricity and auto repairs.

The first year 208 children enrolled, 80 of these being in the new high school.

At present 320 school children live in the district, and it is estimated that 300 of these will be in school next year, with 50 in the high school.

Last year 180 children were transported to and from school in five large Studebaker busses, a few riding 14 miles each way. Two more busses of the same kind have been purchased, and next year at least 240 children will be transported.

All of the nine teachers, each of whom has had either a college or normal training, are nicely and comfortably provided for in the two large new teacherages now being erected by the district. No more itinerant teachers, coming into the district Monday morning and returning to some town early Friday afternoon, for this district. They are expected to live in the district and to identify themselves with the community life therein. Moreover, each teacher will be employed because of some special preparation and fitness for work in a rural school and rural community. The superintendent is a young man with a vision, and already has earned a reputation as a community builder.

This school has also been approved for Federal aid in home economics under the Smith-Hughes Act.

The following summary by States gives some idea of the progress in a few of the States making reports for 1918:

The New England section of States centralizes its rural schools more generally by closing unnecessary small schools and conveying children at public expense to the remaining schools. This tends to remedy teacher shortage, and at the same time provides a better graded school as well. Maine reports having closed many schools during the year, conveying the children to stronger and better schools. Rhode Island reports that school consolidation has progressed as far as it can in the State without overdoing consolidation to the detriment of some of the schools. South Dakota, a State in which school consolidation is of recent origin, reports 42 new consolidated schools.

Maryland and Kentucky, like New England, depend more on closing the small unnecessary schools and conveying the children to larger schools of one and two teachers. Kentucky thus has only 79 consolidated schools, 12 of them with transportation, while it has 1,084 rural schools with two or more teachers. These are of the so called union-school type.

In New Mexico school consolidation is making rapid progress, particularly in the irrigated sections, where many large fine consolidated schools have been organized during the last biennium.

Washington has steadily increased the number of its consolidated schools, there now being 22 such institutions in the State. "It is true in this connection," says the State superintendent of education, "that good roads follow consolidation of school districts in very many instances."

In North Dakota 52 consolidated schools have opened their doors during the year and 60 new consolidations were voted. The total number of consolidated schools in actual operation are 447.

West Virginia has established 120 consolidated schools, 20 being organized during 1918.

Pennsylvania, on account of its difficult topography, has made somewhat slow progress in consolidation of schools. However, as may be seen from the following summary, compiled by the State board of education, some real progress is being made:

Number of one-room schools in the State.....	9, 875
Number of two-room schools in the State.....	1, 320
Number of one-room schools having an average attendance of 12 or less.....	1, 715
Number of townships where complete consolidation would be feasible.....	552
Number of schools or schoolrooms closed as a result of consolidation in the last 10 years.....	715
Number of the above that were one-room schools.....	684
Number of pupils being transported to centralized consolidated or joint schools.....	6, 201
Number of vans, coaches, or wagons used for transportation.....	326

The consolidated schools of Iowa are, most of them, of excellent type. The legal provision for State aid requires a large land area to be used for playgrounds and experimental purposes. This has, from the first, given the consolidated schools of the State a decided agricultural bent. Many of the schools are township-consolidated schools; i. e., they serve the educational purposes of an entire congressional township. Many of them have well-organized four-year high-school departments. The following is a summary of school consolidation in the State:

Up to June 30, 1917, 235 consolidated districts were organized.

Thirty-five thousand boys and girls have passed from the one-room school to a standard graded school.

The advantages of the standard high school have been given to 6,500 boys and girls.

About 8,700 of these high-school boys and girls are from rural districts.

The new schools furnish high-school facilities not alone for their own district but for neighboring districts which pay tuition.

Better grade teachers are secured by the payment of about \$5 per month on the average above what is paid in the one-room schools, and this at a less average cost per pupil.

About \$5,000,000 have been expended for new buildings, grounds, and equipment.

The equipment of these schools is equal to that found in the best city independent districts.

The course of study has been revised to give at least one year of industrial training in the subjects of manual training, domestic science, and agriculture, under the direction of a trained teacher.

In a number of instances special classes have been organized for the instruction of older boys and girls who have dropped out of the one-room school without completing the eighth-grade work.

This work has been carried in the form of winter courses extending from December 1 to March 15.

Two hundred and forty-five thousand dollars has been expended for State aid for consolidation. No money expended by the State has brought greater returns than this.

The State aid has not been given these districts as a gratuity but in return for the expenditure of a much larger amount on the part of local districts for school purposes. The schools have become demonstration schools for the State of Iowa and are thus encouraging other communities to reorganize their small schools.

GROWTH IN RURAL HIGH SCHOOLS.

One of the most urgent problems in rural education is to provide the people with easily accessible rural high schools. The percentage of country people educated in secondary schools of rural type is disappearingly small, in contrast with those who have similar facilities at the industrial centers. Rural people who are favorably situated with regard to town high-school facilities take advantage of the latter, although this school often tends to draw the farming class away from agricultural activities into other callings. It is well to reemphasize here that city high schools are organized for city children. Similarly, rural high schools should be organized for rural children. Some people, and farmers among them, hold the false opinion that to differentiate between city and country people in educational affairs is a discrimination against country children. This knowledge is based on the assumption that city life is superior to country life, which, to those who understand it best, is really the only normal American life there is.

The present movement is to establish rural high schools of an agricultural type in the open country or in the rural villages. The purpose is to organize the course of study to suit the needs of its agricultural environment.

Many States report good progress in establishment of rural high schools during the year. Many of these offer night-school courses for adults, including aliens, who may here obtain their first lessons in American citizenship, short courses for people beyond school age during the winter months, extension courses planned in cooperation with the State colleges, and other progressive activities for the whole community.

The ultimate solution of rural school organization in rural communities will probably be the adoption of the 6, 3, and 3 plan. That is to say, a plan to reduce the number of years in the one-teacher schools to six, which will make it possible to lengthen class recitations and accordingly help the teacher to provide more and better instruction for the several pupils than in the past. The more favored localities will plan to offer a prevocational junior high-school course of three years, in addition to the six years of elementary-school work. Many of these will be open country schools. Finally, a few centers will offer both junior and senior high-school work of an agricultural type—this chiefly in the towns.

West Virginia.—The State board of education has recently adopted a sweeping 6, 3, and 3 plan for the organization of all the schools of the State. This will mean the establishment of junior high schools in a large number of small places which have been unable to afford high-school facilities or which have sought to solve the difficulty by organizing one, two, or three year high schools of the old type, looking toward college entrance. Under the new plan it will be possible to help both those who plan to go to college and the much larger number who will go from school direct to their life work.

Vermont.—Dr. Milo B. Hillegas, State commissioner of education, says:

In Vermont the junior high school is helping in the solution of this problem. During 1916-17 there were 12 of these schools in successful operation in our State and their appeal to parents and children was sufficient to produce a steady increase in their enrollment and attendance. A considerable number of those who had previously left school returned, and virtually no students dropped out except as they moved from the town.

The chief aims of the Vermont junior high schools may be stated as follows:¹

The work of the junior high school is planned for the best interest of the pupils who do not intend or expect to go to college.

The work in the junior high school, so far as possible, recognizes material aptitudes and individual differences of ability in the pupils.

The studies in the junior high school utilize local interest and opportunities.

The work in the junior high school prepares for central or senior high school, and thus for college. It need not, however, include the work ordinarily given in the first and second years of high school.

In other words, to quote further from a recent report on Vermont junior high schools:²

The fundamental purpose underlying the establishment and maintenance of junior high schools in Vermont is the extension of the educational opportunities

¹ See Vermont Junior High Schools. State board of education Bul. No. 1, 1918, p. 5.

² Same, p. 8.

of each individual boy and girl in the State in the light of our professional educational aim—social efficiency. This means that the work must be planned to suit the individual needs of the pupils. It means that the school has just as much responsibility in equipping for their life work, to the greatest possible extent, those large groups of children who drop out of school early as it has in equipping the few who plan to enter college. It means the provision of nourishing, worth-while study material for the gifted pupil quite as much as the discovery of the most promising field of activity *for* and *to* the dull pupil and the development of such abilities and skills as he may possess.

VOCATIONAL EDUCATION AND THE SMITH-HUGHES ACT.

The so-called industrial subjects, including agriculture, home economics, and handwork of boys and girls, which have been making good progress in many States during recent years, have received a new stimulus with the recent passage of the Smith-Hughes Act. While aid is granted under the new law only to persons about 14 years of age, i. e., for secondary training, a marked stimulus has been given the industrial subjects in elementary schools as well, since these prepare for the more advanced and concrete work in the high schools. The new Federal aid is a powerful instrument in organizing good rural high schools in communities which could otherwise have no such facilities. At least two States (Massachusetts and Pennsylvania) have had to make little or no modification in their established vocational schools to obtain the new aid, as these States have been organized on a thoroughgoing State-wide basis for several years.

These two States might well be used as models for other States in which vocational education is not so well established or developed. Accordingly, a somewhat detailed statement of the organization and progress of this type of education in the two States is given herewith. The discussion of the Massachusetts plan has been prepared by Dr. Rufus W. Stimson, agent of the Massachusetts State Board of Education. The statement of the Pennsylvania plan is from the pen of State Supt. Nathan C. Schaeffer.

PROGRESS OF VOCATIONAL EDUCATION IN RURAL COMMUNITIES IN MASSACHUSETTS UNDER THE SMITH-HUGHES ACT.

The Massachusetts home-project plan of vocational agricultural education required no modification in order to meet the conditions of the Smith-Hughes Act. The plan has become somewhat widely known through Bulletin 579 of the United States Bureau of Education and bulletins of the Massachusetts Board of Education, as the "Home Project Plan of Teaching Agriculture." Ten years of experience with this plan have simply led to greater and greater confidence in both its pedagogic and its practical validity.

The home-project plan is a plan of earning and learning. Accurate records of productivity have been kept by pupils from the beginning. Comparative tables have been published from year to year, in which have been shown the earnings of pupils from farm and from nonfarm work. The ratio year by year has continued to be outstandingly favorable to farming. In 1917 reliable re-

turns were made by 511 boys and 7 girls, or by a total of 518 vocational agricultural pupils. Their earnings from farm work amounted to \$111,500.87, and from other work to \$8,808.16. Figures for preceding years were as follows:

Earnings of pupils.

	Boys.	Girls.	Total.	Farm work.	Other work.
Totals for 1912.....	66	4	70	\$9,754.28	\$1,345.89
Totals for 1913.....	86	3	89	15,359.90	3,532.61
Totals for 1914.....	280	5	285	37,936.67	4,124.08
Totals for 1915.....	413	5	418	51,379.89	4,974.86
Totals for 1916.....	489	3	492	76,766.53	8,406.90

If the ratios were reversed it would be a fair presumption that agriculture were not the main, but decidedly the minor, interest of the pupils. Direct "learning" gains can not be measured in dollars and cents, and are difficult of precise measurement in other terms. Those who have given but little thought to the methods of instruction used have sometimes argued that the principal aim in Massachusetts was the dollar or the earning. In Massachusetts we have frankly accepted as a challenge to our best endeavors the reasonable expectation that if our instruction in agriculture is sound, is worth while, it ought to yield a profit from year to year; but, having accepted this challenge, we have by no means neglected the other challenges of vocational education.

Pupils are admitted, on reaching their fourteenth birthdays, to the advantages of vocational agricultural education, provided they can establish a reasonable presumption that they can profit from it. Academic standards such as have determined admission to high school have not been enforced. In most cases, however, vocational pupils could have entered high schools without conditions, and the grade of mental ability and the rate of progress among agricultural pupils have compared favorably with those of other pupils of high-school age.

The vocational agricultural schools and departments in high schools are suffering, as are other schools and departments of education, from the war. Returns for 1918 will not be filed until about November 1. It is more than likely that a 30 per cent shrinkage of enrollment will be shown by those returns.

The principal forward step in Massachusetts in connection with the receipt of Smith-Hughes funds for vocational agricultural education is the establishment of a new agricultural teacher training plan. This is a sort of project plan of teaching teachers how to teach agriculture after they have been appointed for service. The instruction will be itinerant—from teacher to teacher and from school to school. One man is devoting his time exclusively to this work. No two schools are alike. Agricultural departments in high schools differ from the schools and from each other. The teacher trainer is studying the conditions under which each must do his work and is helping each teacher on the spot better and better to meet the conditions with which he is confronted.

Twenty special war-emergency departments have been approved in which State-aided agricultural instructors are supervising war gardening by adults. Last year 2,549 adults grew war-garden products to the value of \$73,180.71, of which, products to the value of \$45,083.50 were for home use and the remainder for sale or exchange. State aid for such work was approved in the cases of eight towns and cities. During 1918 the number of towns and cities receiving State aid has been increased to 20, and the products bid fair to be increased proportionately.

RURAL COMMUNITY VOCATIONAL SCHOOLS IN PENNSYLVANIA.

Twenty-three agricultural high schools, commonly known as rural community vocational schools, have been established in the rural districts of Pennsylvania. Each one of these schools is practically an agricultural continuation school, as the farmers' boys enrolled therein are continuing their education while being regularly employed on the farms. In all of these vocational schools night schools were held during the winter for farmers and their sons who were beyond school age. These courses usually extended through a period of six weeks. In one or two of the schools short courses were conducted during the winter for young men who previously dropped out of school but who wished to continue their education along agricultural lines during the winter months. The State College of Agriculture cooperated very effectively in the operation of the night schools by furnishing many speakers and teachers.

Forty-two rural communities have established vocational agricultural education for boys, and 33 rural communities have also established vocational home-making education for girls. The war has prevented the rapid development of this work by calling many of our agricultural instructors into military service. Plans are being effected for a broad development of this work immediately upon the close of the war.

Rural districts establishing and operating rural community vocational schools have invariably increased the tenure of office of their teachers by employing the principal of the school for a period of 10 or 12 months per year, and the agriculture teacher always for a 12 months' period. Many of these teachers are given a three-year contract. Salaries of teachers in these rural community vocational schools have risen quite steadily. The principal of the high school now usually receives from \$1,200 to \$1,800 per year; the teacher of agriculture \$1,200 to \$2,000 per year; the vocational supervisor of home making about \$100 per month; and assistant teachers in the academic department from \$75 to \$125 per month.

The rural community vocational school has a staff of teachers ranging from three to six in number, the number depending upon the size of the student body. About 75 per cent of these teachers are college graduates.

Plans are now being developed and will this month be submitted to the State board of education for the training of vocational teachers of agriculture and teachers of home economics in vocational schools.

The most encouraging part of our plan for rural community vocational education seems to lie in the fact that we are securing teachers who are better prepared for their work and who are being paid higher salaries with longer tenures of office.

THE RURAL SCHOOL COURSE OF STUDY.

The reorganization of the course of study for rural schools is probably the most important phase of rural education that engrosses the time of rural educators at the present time. Readjustments are gradually taking place in the materials and methods of the rural schools, but such a hold has tradition on what is taught and learned in the schools that the process of change has been exceedingly slow. In the past, progress in teaching rural school subjects from the occupational point of view has been hindered greatly by inflexible established State courses of study, which are usually planned alike for all elementary schools, whether in town or in country.

Fortunately, many States are beginning to plan distinctive courses for the rural schools. Louisiana has attained marked success in its rural schools under a very progressive course of study planned several years ago. Montana has recently published a course of study covering all the fundamental subjects and vocational subjects usually taught in the rural schools. Other States are planning similar courses for their rural schools.

Meanwhile, several committees have been organized, or are being organized, for the purpose of making a fundamental study of the entire field of rural education.¹ In the same connection should be mentioned the innovation recently made for the study of rural education by the rural education department of Teachers College, Columbia University. This embraces a cooperative plan of education between Teachers College and two New Jersey counties, the schools of which will be used as practice schools and study laboratories for the development of the best teaching practice and study course for rural schools.

STATUS OF TEACHERS FOR THE RURAL SCHOOLS.

Effect of the war on teacher supply.—A study made by the rural school division of the bureau indicates clearly the serious proportions reached in the dwindling of the supply of rural teachers. Partial returns have been completed from 1,150 out of 2,964 counties in the 48 States. According to the figures returned, these 1,150 counties report a shortage of 10,456 rural teachers and 2,004 other teachers. Only one State, California, reports no teacher shortage, either rural or urban. On the basis of the counties compiled to date, there is probably a shortage of about 27,000 rural teachers and at least 5,000 other teachers. The bureau estimate for past years places the annual number of new rural teachers at 87,500. The proportion of beginning teachers for the year 1918-19 is abnormally large. In some counties the superintendents report as high as 85 per cent of teachers without previous experience. The median for experienced teachers for the country at large is 19 per cent. On the basis of figures returned, at least 125,000 inexperienced teachers will be employed in rural communities. In addition to this, the rural schools are losing most of the small number of men teachers. The 1,150 counties reporting have lost 1,955 men. Indeed, 41 per cent of all men who taught in rural schools one year ago seem to have left the profession. The reports from Connecticut indicate that the few men who have taught in the rural schools will all be replaced with women teachers for the current school year.

¹ Notably may be mentioned the Bureau of Education committee on rural school courses of study, and the educational committee of the recently organized National Rural Life Commission.

Even before the war the most difficult phase of the whole educational problem was how to get and retain in the profession an ample staff of well-prepared rural teachers. Since the country's entrance into the war the problem has become greatly intensified. Now is the time therefore to drive home to the people what is necessary before better things can be attained in the field of professional rural teaching. The public will have to become fully aware of their responsibility toward the teachers; they will have to make the schools and housing conditions more attractive than they now are, and in other ways make feasible long, well-paid tenures in the same community. The Government must, by legal enactment, safeguard the profession and offer special inducements to all teachers to equip themselves well for their profession as a life work. With this as a basis, the teachers will be more ready than now to strive to attain genuine professional standards of teaching.

Teaching rewards.—Teaching rewards should bear a definite relation to the experience and time incurred in securing the teaching certificate. Salaries ought, accordingly, to be based on the kind of certificate held. There should in every State be a legal minimum salary for each type of certificate. Similarly a second year in the same school community ought to be awarded with a State grant of a definite sum, say \$5 per month; a third year with double the above sum; and the fourth and each subsequent year with treble the first sum. These bonuses should always be in addition to the salaries paid by the local community.

As has been pointed out elsewhere in this chapter, several States have already adopted the plan of scaling salaries on the length of experience and the kind of teaching credentials held by the teachers. Wisconsin, Indiana, and Maryland are among the States basing their salary scales on the degree and kind of professional preparation and tenure in the same community.

Paradoxical as it may seem at first thought, the remedy for an ample supply of well-prepared teachers should be sought in gradually increased professional requirements of all rural teachers. While during the war period it was impracticable to legislate against admission to the teaching ranks by the ordinary examination route, the present is the right time to look forward to ending this practice as soon as possible. The teacher in the effective rural community school of the future may be expected to come into the profession from the professional teacher-training schools only. This, together with increased salaries and improved living conditions, will help to dignify the profession and place it on the higher level which should always have held, but which in recent years seems to have been largely lost to the American teacher.

Professional requirements.—Many States are steadily increasing the professional requirements of all teachers. The normal requirement recently laid down by the Bureau of Education in its State surveys is being adopted in several sections in the country. (See the chapters on Preparation of Public-School Teachers, Biennial Survey of Education, 1916-1918.) This standard requires that all public-school teachers must, as a minimum, have completed a four-year high-school course and have had, in addition thereto, at least one year of professional training. This includes rural schools teachers as well as other teachers.

In order to reach these standards by a time fixed by law, several States, through their normal schools and other teacher-training institutions, have established interesting and profitable extension services over the State, for the teachers who are unable to attend the normal school regularly. The first State to enact a movement of this kind was probably Iowa, which, through the State Teachers' College at Cedar Falls, has organized a State-wide service of this kind. The Bureau of Education, in its surveys of education in North Dakota, Washington, and Arizona, has recommended similar extension services for these States, which are just getting underway.

Schools preparing rural teachers.—During the school year ending 1915 the 273 public and private normal schools enrolled 100,325 students and graduated a total of 21,944. It is quite certain that most of these teachers found positions in towns and cities, as did most of those who graduated from the schools of education in universities and colleges. The agricultural colleges have also done something for the preparation of secondary-school teachers in agriculture and teachers for some of the strongest consolidated schools.

The largest immediate supply of rural teachers comes from the training departments of the high schools in many States. Next in point of numbers stand the normal schools; then, in the order mentioned, the schools of education in colleges and universities and the agricultural colleges. A study¹ recently made by the Bureau of Education on rural-teacher preparation in county training schools and high schools discloses that 21 States in 1915-16 were preparing teachers for rural communities in 1,493 county normal schools and high-school training departments and classes, which enrolled a total of 27,111 students. From these schools 16,626 teachers were graduated in 1917. Since that time Montana has organized similar classes in 11 schools, with an aggregate attendance of 200 students.

The real hope of the country for an ample supply of well-trained rural teachers still rests with the public normal schools. A few years ago these institutions were devoting most of their energies to train-

¹ Bulletin, 1917, No. 31.

ing city and town teachers. During the past few years there has been a marked change in the disposition of the normal schools in this regard. Many of them, established in agricultural sections of the country, have reorganized their work to meet the demands for the new type of rural teachers. In many schools this reorganization has come as well organized, distinctive rural-school departments in charge of a director and assistants. In other schools the work has not gone quite so far and is being offered as special courses for rural teachers, given chiefly during the summer sessions. Experience with the two types of organization demonstrates quite clearly that the only worth-while organization is the special rural teacher-training department. Up to the present time 122 rural-school departments have been established in the normal schools. Many of the departments are in charge of a director, who usually teaches rural sociology and economics, and one or two other instructors, one of whom is a rural critic teacher. Altogether 84 of these departments make use of rural practice schools, either erected on the campus or located in near-by country districts; 97 other normal schools offer specific courses for training rural teachers, some limiting the courses to the summer sessions. The above enumeration shows an increase of almost 100 per cent in these facilities over what the schools offered in 1915, but even with such progress there is much still to be done, as many of the schools do not realize the far-reaching importance of the work of these specialized departments and do not support them as liberally as should be done to make the work in every respect satisfactory.

NATIONAL RURAL TEACHERS' READING CIRCLE

The National Rural Teachers' Reading Circle was organized by the Bureau of Education in 1915 in cooperation with an advisory committee of the State superintendents of public instruction. The purpose is to be of direct assistance to the thousands of progressive serious-minded rural teachers of the country who desire guidance in their study to improve themselves professionally. Never in the history of our country was there so great a demand for well-prepared rural teachers and supervisors as at the present time. It is to assist in finding and equipping these educators that the Bureau of Education organized the reading circle work three years ago.

The American farmers are doing their great share in winning the war through increased production from the land. After the war is won the rural population must take an equally vital part in the economic reconstruction that is sure to follow. This calls for a new type of leadership, cultured and educated in practical phases of modern scientific agriculture. The most important and indispensable agent in the attainment of this task will be the rural teacher. Without the

well-educated, broad-minded, sympathetic teacher any system of education can only be a lifeless mechanism.

Therefore, the public must look to the country teachers and their preparation and see to it that they shall be men and women of the best native ability, the most thorough education, and the highest degree of professional knowledge and skill. Since the time of organization a large number of progressive rural teachers of the country have become members of the reading circle. No attempt has been made to draw to the circle large numbers; the aim has been rather to list a few leaders from each county in the several States. Results have been very satisfactory. Of the number matriculated a large percentage have completed the work and have received the commissioner's certificate.

The reading circle is without cost to the members aside from procuring the necessary books, which may be furnished from the publishers at regular retail rates or they may be secured through local libraries, or in other ways. There is no restriction as to membership, although it is highly desirable that applicants have a liberal acquaintance with the best literary works, past and present.

The books for this period reflect largely the new conditions in education due to the unprecedented changes going on in the world today. They are classified under six heads as nonprofessional books of cultural value, civic and patriotic readings, educational classics, general principles and methods of education, rural education, and rural-life problems.

The work is intended as a two-year reading course, although it may be completed by the industrious teacher in a shorter time. To those who give satisfactory evidence of having read intelligently not less than four books from the general-culture list and three books from each of the other five lists—19 books in all—within the two years of the time of registering will be awarded a National Rural Teachers' Reading Circle Certificate signed by the United States Commissioner of Education.

COMMISSIONS AND COMMITTEES ORGANIZED FOR THE ADVANCEMENT OF RURAL EDUCATION AND LIFE.

Several commissions have been organized during the year for the advancement of rural education and life. The most important of these organizations are here noticed.

The National Country Life Commission.—The first steps toward organization were taken by a number of educators interested in following up the work done by the original commission on country life appointed by President Roosevelt in 1908. A permanent organization was formed at Pittsburgh, June 29, 1918.

The general program and objectives of the commission have since that time been definitely settled and committees have been appointed. These include the following committees: I. Means of communication. II. Home making. III. Means of education. IV. Rural government. V. Health and sanitation. VI. Recreation. VII. Country planning. VIII. Morals and religion. IX. Country life objectives and values.

These committees are most of them divided into subcommittees. The committee on means of education is subdivided as follows: (a) Rural, elementary and secondary schools; (b) Agricultural education; (c) Adult education.

The central purpose of the commission is to make a study of the important problems in rural life, what principles govern their solution, and what steps should be taken now toward meeting them. Plans are underway to prepare a statement of the whole rural problem, including references to easily available literature on this subject for the use of school officials, elementary schools, high schools, granges, farmers' unions, rural women's clubs, farm bureaus, and other country organizations. Dr. Kenyon L. Butterfield, president of the Massachusetts Agricultural College, Amherst, is general chairman of the commission, and Dwight Sanderson, United States Department of Agriculture, secretary.

Committee on study of consolidation and rural high schools in the United States and Canada.—This committee was organized by the section of State supervisors of the National Education Association, at its Kansas City meeting. The work has gradually been expanded from a rather small effort to a most thoroughgoing study of school consolidation and rural high-school organization in all the American States and the nine Canadian Provinces. The central committee consists of H. W. Foght, chairman; S. B. McCready, Toronto, Canada; Lee Driver, Winchester, Ind.; Miss Charl Williams, Memphis, Tenn.; J. M. Foote, Baton Rouge, La., and C. G. Sargent, Fort Collins, Colo. This committee is working in cooperation with a larger committee of 57 educators, representing the several State departments of education and Canadian provincial ministries of education.

The work of this committee is now well underway. It is the committee's purpose to report at the Chicago meeting of the Department of Superintendence in February, 1919. The scope of the work will include statistical data from all the States and Provinces, together with intensive studies of 19 counties and a large number of individual schools. The results of the study will be published as a bulletin by the Bureau of Education.

The Bureau of Education committee on rural school course of study.—The Bureau of Education has worked on the reorganization of the rural school course of study for several years. The bureau spe-

cialists are working in cooperation with an outside committee of educators selected from the several sections of the country at large.

This committee has undertaken a searching study of rural education. The plan underway is first to organize the content of the course of study, based on cultural and occupational needs. This subject matter is then to be tested and worked out in practice schools at several places over the country.

The committee on rural education appointed by the National Education Association at its regular summer session.—The committee comprises representative educators headed by State Supt. J. Y. Joyner, of North Carolina. The purpose of this committee is to make a searching study of rural education in all its several phases.

RURAL-SCHOOL SURVEYS.

Several important school surveys have been completed within the last biennium which have emphasized various phases of rural education. Among them may be mentioned the following State-wide studies made under the direction of the Bureau of Education:

A survey of the educational institutions of the State of Washington.

Educational survey of Wyoming.

Educational conditions in Arizona.

Educational survey of Tennessee.

Educational survey of the schools of South Dakota.

While all these surveys give space to the rural schools, the subject is notably emphasized in the studies of Wyoming, Arizona, South Dakota, and Tennessee. Some instructive age-grade statistics, included in the surveys, show graphically that the present system of school education in country districts is much less effective than the schools in the incorporated places, the number of overage pupils being fully 25 per cent greater in the rural communities than in the towns and cities.

Self-surveys of rural schools have been promoted in a number of States, notably in Minnesota, Wisconsin, Missouri, and Montana. The tabulations and conclusions of these surveys may be procured by addressing the several State departments concerned.

PUBLICATIONS ON RURAL EDUCATION OF THE BUREAU OF EDUCATION.

A number of publications on rural and agricultural education have been compiled and distributed by the Bureau of Education during the past year. These publications include occasional bulletins and rural-school letters and circulars published by the bureau and pamphlets and brochures published by other governmental and private

organizations but distributed by the bureau. Much of this material deals with timely topics of the war emergency. Bulletins of the bureau on rural and agricultural education published since the last report on rural education are as follows:

- Bulletin, 1916, No. 26, A Survey of Educational Institutions of the State of Washington.
- Bulletin, 1916, No. 29, Educational Survey of Wyoming.
- Bulletin, 1916, No. 41, Agricultural and Rural Extension Schools in Ireland.
- Bulletin, 1916, No. 44, The District Agricultural Schools of Georgia.
- Bulletin, 1916, No. 48, Rural-School Supervision.
- Bulletin, 1917, No. 5, Report of Inquiry into the Administration and Support of the Colorado School System.
- Bulletin, 1917, No. 31, Rural-Teacher Preparation in County Training Schools and High Schools.
- Bulletin, 1917, No. 33, A Comparison of the Salaries of Rural and Urban Superintendents of Schools.
- Bulletin, 1917, No. 35, The Township and Community High-School Movement in Illinois.
- Bulletin, 1917, No. 44, Educational Conditions in Arizona.
- Bulletin, 1918, No. 3, Agricultural Instruction in the High Schools of Six Eastern States.
- Bulletin, 1918, No. 27, Rural-Teacher Preparation in Normal Schools.
- Bulletin, 1918, No. 31, Educational System of South Dakota.



BULLETIN OF THE BUREAU OF EDUCATION FOR 1919.

- No. 1. Monthly record of current educational publications, January, 1919.
- No. 2. Standardization of medical inspection facilities. J. H. Berkowitz.
- No. 3. Home education. Ellen C. Lombard.
- No. 4. A manual of educational legislation.
- No. 5. Instruction in music, 1916-18. Waldo S. Pratt.
- No. 6. The half-time school. H. W. Foght.
- No. 7. Rural education, 1916-18. H. W. Foght.
- No. 8. Life of Henry Barnard. Bernard C. Steiner.
- No. 9. Education in Great Britain and Ireland. I. L. Kandel.
- No. 10. Educational work of the churches in 1916-18.
- No. 11. Monthly record of current educational publications, February, 1919.
- No. 12. Education in the Territories and dependencies.
- No. 13. Review of educational legislation, 1917 and 1918. Wm. R. Hood.
- No. 14. Monthly record of current educational publications, March, 1919.
- No. 15. The adjustment of the teaching load in a university. L. V. Keos.
- No. 16. The kindergarten curriculum. Almira M. Winchester.
- No. 17. Educational conditions in Spain. Walter A. Montgomery.
- No. 18. Commercial education, 1916-18. Frank V. Thompson.
- No. 19. Engineering education, 1916-18. F. L. Bishop.
- No. 20. The rural teacher of Nebraska.
- No. 21. Education in Germany. I. L. Kandel.
- No. 22. A survey of higher education, 1916-18. S. P. Capen and W. C. John.
- No. 23. Monthly record of current educational publications, April, 1919.
- No. 24. Educational work of the Boy Scouts. Lorne W. Barelay.
- No. 25. Vocational education. William T. Bawden.
- No. 26. The United States School Garden Army. J. H. Francis.
- No. 27. Recent progress in negro education. Thomas Jesse Jones.
- No. 28. Educational periodicals during the nineteenth century. Sheldon E. Davis.
- No. 29. Schools of Scandinavia, Finland, and Holland. Peter H. Pearson.
- No. 30. The American spirit in education. C. R. Mann.
- No. 31. Summer schools in 1918.
- No. 32. Monthly record of current educational publications. Index, February, 1918-January, 1919.
- No. 33. Girl Scouts as an educational force. Juliette Low.
- No. 34. Monthly record of current educational publications, May, 1919.

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 8

LIFE OF HENRY BARNARD

THE FIRST UNITED STATES COMMISSIONER
OF EDUCATION, 1867-1870

BY

BERNARD C. STEINER



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PREFACE.

Henry Barnard was "one of the men who revitalized the American common-school system" (*Nation*, Aug. 5, 1914, p. 178), and, as such, he is clearly worthy of a biography. Not only was his service a noted one to elementary education, but as college president and as the organizer of the United States Bureau of Education his activity also touched other parts of our educational development. If he left untouched any field of instruction in these various activities of his career, he certainly claimed the whole universe of education as his province through his editorship of the *American Journal of Education*. Like Nestor, he lived through two generations of men and then sat amid the third, which gladly did him honor. His great saying is worthy of remembrance that the country should have "schools good enough for the best and cheap enough for the poorest."

"A man's life ought to be written only when he is a representative man, integrated with the life of the times, an enunciator of great thoughts, or one who has done wonderful acts," said President Francis L. Patton in a recent sermon. Judged by these canons, Barnard's life should be written, for he comes within at least three of them. No one stood forth as a truer representative of the inquiring, eager, earnest spirit of the American nineteenth century, seeking to know what was true and to know how to attain success in encountering the problems of life.

The especial thanks of the author are due to Dr. Barnard's daughters, who have given him access to their father's papers, permitting him to have full use of them. These papers are for the most part in the custody of the Watkinson Library, Hartford; and Mr. Frank B. Gay, the librarian, gave every courtesy needed, while they were being examined. Mr. David N. Camp, who so long was associated with Dr. Barnard, has contributed some interesting reminiscences, which are printed as an appendix. The statement of Rev. Anson P. Stokes, in his "Memorials of Eminent Yale Men," that "a life of Henry Barnard is a desideratum," was the first suggestion that this work be written.

LIFE OF HENRY BARNARD.

Chapter I.

EARLY YEARS AND EDUCATION (1811-1830).

In 1810 the census taker found 6,003 people in Hartford. The town was a county seat as well as one of the two capitals of the State, and the legislature met there in semiannual session; but there was little else to distinguish the place from other New England towns. The clapboarded houses standing along the streets were occupied by people of English blood, whose ancestors had come to America more than 150 years before. The standing order of the Congregational Churches had not yet been swept away by the constitution of 1818, and the State of Connecticut had not been stirred to manufacturing by the embargo, the War of 1812, and the subsequent tariffs. On South Main Street, near an open common known as the South Green, in a large double house built of bricks and surrounded by ample grounds, Henry Barnard 2d was born on January 24, 1811. His father was a well-to-do farmer who had the intelligence characteristic of the old Puritan stock. He had spent some time in seafaring, as had so many a Connecticut man, and the son remembered his return on one occasion, bringing an orange to the boy. Mrs. Barnard's maiden name was Elizabeth Andrus. Her influence upon her son was not long to continue, for one of his earliest memories was watching from an upper window in February, 1815, a funeral which he was told was his mother's. There were other children. Of the home life, in after years Barnard wrote: "It was my blessed inheritance to be born in a family in which chore-doing and mutual help was the rule and habit and happiness."

Among the remembrances of his early youth were those of the firing of a "big gun" on the South Green, early in 1815, to celebrate the conclusion of peace with Great Britain; the great gale of September of that year, which wrenched a branch from the great elm before the house; the reception to Commodore MacDonough in February, 1817; and the parade with which President Madison was received in Hartford in the following June. As long afterwards as 1897 he recalled the Hartford County Agricultural Show held upon the South Green, October 1, 1818.

He learned to say "Now I lay me down to sleep" from an elder sister and received the usual training in the Westminster Catechism, of which training he expressed disapproval in later years.

His school life began with instruction at Miss Benton's Dame School, whence he was soon transferred to the South District School.

The talk of the South Green did not run to Latin, Greek, and mathematics; nor was his early boyhood spent with the sons of college graduates. On Saturdays he acquired the habit of taking long walks, and out of school hours he played what the boys called "golf," probably hockey or shinny, as well as football, and such other sports as could be indulged in on the public highways. In the winter, snow-ball battles were waged with the pupils of the Hartford Grammar School, founded by the bequest of Gov. Hopkins in the seventeenth century, whose pupils were thought by the Southside boys to be a privileged set, coming mostly from uptown families.¹

Barnard did not enjoy the district school, and in 1838 spoke publicly of himself² as a "victim of a miserable district school." In after years, however, he looked back with gratitude upon his experience in that school, because it was "a school of equal rights,³ where merit, and not social position, was the acknowledged basis of distinction and therefore the fittest seminary to give the schooling essential to the American citizen."

So wretched did he become that when he was 12 years old⁴ he thought of running off to sea. His father overheard him plotting with a friend to do this and wisely told the boy that it was time for him to leave the common school and that he might go to boarding school or to sea. He also had the opportunity of going to the local grammar school, but chose to spend the year as a student in the academy at Monson, Hampden County, Mass. This school was chosen because his comrade had friends there, and thither his father drove with him in 1823. At 13 years of age, Barnard, "fortunate to get away from the miserable routine and cruel discipline of the old South District School," was boarding in the family of Deacon Raymond, in a "beautiful village."⁵ In Monson Academy, Barnard enjoyed—

one year of thorough training in my English studies and of kind, encouraging advice as to how to study and use books from that accomplished teacher, Samuel B. Woolworth, afterward the successful principal of Cortland Acad-

¹ 28 Am. J. Ed., 208. Chauncey Barnard, a brother with whom Henry corresponded while on his southern trip in 1833, is given in the Hartford Directory of 1828 as living at 328 Main Street.

² 28 Am. J. Ed., 227.

³ 4 N. E. Mag., 445, May, 1886.

⁴ Hughes, James L., in N. E. Mag., N. S., XIV, 560, 1896.

⁵ 17 Am. J. Ed., 563, by Rev. Charles Hammond; 28 Am. J. Ed., 208.

emy, New York, and for a quarter of a century secretary of the board of regents of the University of the State of New York. Not less profitable was my classical instruction from the principal, Rev. Simeon Colton.*

The journey to Monson gave Barnard his first conscious enjoyment of natural scenery, the love of which, he wrote in 1890, had grown throughout his whole life. Not only the instruction given at Monson Academy and its natural surroundings pleased him; but also, even in old age, he felt that he had "never met a more pure, benevolent, hospitable people, or more general intelligence, than in Monson." The students had come from 20 towns of Massachusetts and Connecticut, and association with them stimulated his mind as much as the sympathetic and thorough instruction received from the teachers.⁷ Many of these fellow students were "of mature age, great earnestness, and high purpose," who "*went* and were not *sent*" to school. Barnard joined the Lincollian Literary Society and wrote, years afterwards, that—

the book, as the garnered wisdom, always had a charm and value to me; and the library, not having many books at home, was my admiration and delight; and research for debate, for myself and others, was always my delight. To books, libraries, and debate I owe more than to school, college, or professors.

He developed a—

love of nature, from the romantic valley in which Monson lies, and gained an interest in the wider range of social and industrial problems through visits to rural homes of schoolmates and investigation of numerous factories of the neighborhood.

In June, 1895, he attended the commencement exercises at the academy and heard an older fellow student, Trask, of Saratoga, describe him as a boy "who played all the time, but beat us all at our lessons."⁸ It is not too much to say that Barnard's life received such important influence from this year that to this period we may date the purpose of which he told the reporter of the Hartford Times in 1894:

Ever since I was conscious of any purpose, the aim of my life has been to gather and disseminate knowledge, useful knowledge—knowledge not always available by the many but useful to all, to gather it from sources not always available even to students and scatter it broadcast.

On the youth's return from Monson, he spent several months in study with Rev. Abel Flint.⁹ From him Barnard learned Greek and surveying. The boy regarded his tutor as "the most eloquent man of his day," and recalled him as a man of "impressive appearance."

* A. B., Yale, 1806; d. 1868; at one time president of Mississippi College.

⁷ N. E. Mag., N. S., XIV, 580, 1896.

⁸ Ibid., 582.

⁹ A. B., Yale, 1785, d. 1825.

At the end of this tutoring Barnard entered the Hopkins Grammar School, at Hartford, of which William M. Holland¹⁰ was master, "well prepared to profit by its exclusive classical training indoors, as for its vigorous games of football out of doors, by my long practice in all sorts of foot exercises and ball playing on the South Green."¹¹ Holland was "one of the best teachers" Barnard ever knew. Barnard wrote in 1870:

The trustees made, in his case, the same mistake as I think they had before and since made—let the institution become a school of practice for Yale College tutors, or the place where future professors could spend their "pedagogic year," as the Germans call this opportunity for young candidates for the secondary schools to test and develop their skill in method and discipline.

In retrospect, Barnard felt that he "never enjoyed school life more." Among the students with Barnard were: Prof. Thomas A. Thacher, of Yale College; Rev. A. L. Chapin, of Beloit College; and Prof. N. P. Seymour, of Western Reserve College. In 1870 Barnard wrote that:¹²

Mr. Holland was the sort of teacher I needed. He was prepared to solve promptly all questions of my starting. He knew the books and just the chapters and passages which I could read with advantage in connection with my lesson before I came to the recitation, and my recitations in Greek were by myself, out of school hours; and instead of puzzling my brain over the meaning of particles and the mystery of declensions and moods, he encouraged me to read and acquire a vocabulary by reading, and explained felicitous passages by parallel passages in English literature. I read the whole of Homer's *Illiad*, one or two orations of Demosthenes, and several books of Herodotus and Thucydides. The result was bad, in one respect; my preparation for my Greek recitations in college cost me little effort, in consequence of which I made little progress in that study; but, on the other hand, it left me time to read, which I improved, to my great delight, in the perusal of the best English authors.¹³

While at the grammar school he borrowed books from the Hartford Library, having access thereto through the kindness of Mr. Daniel Wadsworth and being advised in his reading by Mr. Holland.

Stimulated by his school training to desire a college course, Barnard entered Yale in 1826 and graduated with the degree of bachelor of arts in 1830. He won a Berkeley premium in his sophomore year¹⁴ and was in the first sixth of the class in scholarship throughout the course, winning membership in Phi Beta Kappa. He roomed in South College as a freshman, with a private family as a

¹⁰ A. B., Yale, 1824; later professor of ancient languages in Trinity College, Hartford; d. 1842.

¹¹ 28 Am. J. Ed., 208.

¹² *Ibid.*, 209.

¹³ Barnard felt that the great defects of this school, as compared with the later high school, were that girls were excluded, there were no English studies above arithmetic, and the price of tuition was too high for pupils in moderate circumstances. 28 Am. J. Ed., 209.

¹⁴ 28 Am. J. Ed., 209.

sophomore, in North Middle College as a junior, and in North College as a senior. Most of his vacation he spent at home, occupying his room in the second story on the south side of the front door of his father's house; but in the spring vacation of 1828 or 1829 he visited Washington and Mount Vernon. In 1828, in New York, he met the poet Bryant at the table of Michael Burnham, the publisher of the *Evening Post*. In another vacation trip he visited Boston. The money he saved from his traveling allowances was spent for books. In every city where he stopped the schools were an "object of interest as an index and measure of the civilization and culture" of the people. As a result of these journeys he wrote in 1828 and 1829 for the weekly *New England Review*¹⁵ articles on New York, the Boston Latin School, the Worcester Central High School, Dwight's Gymnasium at New Haven, and Cogswell and Bancroft's School at Northampton.

He loved long walks, as well as carriage trips. From Monson to Hartford he had returned on foot. He made a geological excursion from Hartford to Haddam, and walked to New Haven for commencement.

While he was in college the great "Bread and Butter Rebellion" took place because of the poor quality of the college commons. Barnard was sent home for a time because of his part in it. While he was in Hartford his sister fell ill, and from her attending physician, Dr. Eli Todd, the superintendent of the Connecticut Retreat, "a man of rare genius," Barnard heard of Pestalozzi and caught the enthusiasm with which Dr. Todd regarded him. Todd had met William McClure, "the first real Pestalozzian in America," and passed on from him to Barnard a high opinion of the Swiss educator.¹⁶

A serious-minded youth, Barnard planned a public career for the improvement of his country, and received much inspiration from reading in 1827 Lord Brougham's address, delivered two years previously, as lord rector of Glasgow University, in which address the following paragraph is found:¹⁷

To diffuse useful information; to further intellectual refinement, sure forerunner of moral improvement; to hasten the coming of the bright day when the dawn of general knowledge shall chase away the lazy, lingering mists, even from the base of the great social pyramid—this indeed is a high calling, in which the most splendid talents and consummate virtue may well press onward, eager to bear a part. Let me hope that among the illustrious youths whom this ancient Kingdom, famed alike for its nobility and its learning, has produced to continue her fame through the ages, there may be found some one willing to give a bright example to other nations in a path yet un-

¹⁵ 28 *Am. J. Ed.*, 227.

¹⁶ *N. E. Mag.*, N. S., XIV, 565.

¹⁷ *N. E. Mag.*, N. S., XIV, p. 562, 1896.

trodden, by taking the lead of his fellow citizens, not in frivolous amusements, nor in the degrading pursuit of the ambitious vulgar, but in the truly noble task of enlightening the masses of his countrymen and of leaving his own name, no longer encircled, as heretofore, with barbaric splendor, or attached to courtly gewgaws, but illustrated by the honors most worthy of our rational nature, coupled with the diffusion of knowledge and gratefully pronounced through all ages by millions, whom his wise beneficence has rescued from ignorance and vice.

President Noah Porter, who graduated from Yale in 1831, wrote in 1851¹⁸ that "few professed scholars among us were so thoroughly familiar with the ancient and modern English literature" as Barnard, and the latter tells us himself that,¹⁹ in the junior and senior years he devoted himself "diligently to systematic reading in English literature, practice of English composition, and written and oral discussion." He became a ready, polished, and vigorous speaker. The college library was only open to juniors and seniors in those days; but the libraries of the literary societies were open to all their members. Barnard became a member of Linonia. In later life he said that "he owes more of his usefulness in public life to the free commingling of members of different classes, of varied tastes, talents, and characters, to the excitement and incentive of the weekly debate, to the generous conflict of mind with mind,²⁰ and to the preparation for the discussions and decisions of the literary societies with which he was connected," than to any other source.

He wrote a drama for a Linonian Exhibition, which play James A. Hillhouse thought worthy of the stage; the fourth act of this play is extant and is in blank verse, smooth and correct, but it shows little inspiration and is a product of the *sturm und drang* period of a man's life. In junior and senior years Barnard was librarian of Linonia, of which he also became president, and he expended the compensation paid for his services in a donation of books to the library. The knowledge of books and of the practical management of libraries gained as Linonia's librarian was of great service to him in organizing school and other public libraries in future years.

At graduation, Barnard read a dissertation on "The Services Rendered to Christianity by Poetry," which is preserved and is of the usual academic character. Three years after leaving Yale, on June 21, 1833, he wrote down this memorandum:

On looking over the books this day, I found that I received from my father from the first of September, 1826, to the tenth of September, 1830, in cash, \$997.90. This includes my traveling expenses to and from New Haven, my expeditions during vacation, my college bills (which amounted to \$493.67)—in fact, all my expenses during college life. However, I left New Haven

¹⁸ N. E. Mag., N. S., XIV, 563, 1896.

¹⁹ 1 Am. J. Ed., 663.

²⁰ 1 Am. J. Ed., 664.

with a few bills unsettled, viz, Ms. Durrie & Howe for books, amounting to \$30 or \$40. It is probable that I might have received some money for books during vacation which were never entered.

Throughout his whole life, Barnard kept his love for Yale. Of this love, his daughter²¹ in presenting his class records to Yale in 1910, wrote:

Yale never had a more loyal or loving son than my father; his college friends of 70 years ago were his intimate friends till their deaths; and Yale interests were his interests always. It was a bitter disappointment to him that he was too ill in June to go to the alumni meeting (his seventieth anniversary), as he had done for so many years. The last time he left home was to go to President Hadley's inauguration.²²

²¹ Stokes, "Memorials of Eminent Yale Men," I, p. 255.

²² A brief life of Barnard was written by Will S. Monroe and published by Bardeen in 1893 as "Educational Labors of Henry Barnard, a Study in the History of American Pedagogy," pp. 35. This book contains illustrations representing Barnard in 1854, 1870, 1893, and an undated picture of him in old age. A biographical sketch is found in Stokes's "Memorials of Eminent Yale Men," I, 257. Important magazine articles may be found in I Am. J. Ed., 663; 28 Am. J. Ed., 208 and 225 (autobiographical); 30 Am. J. Ed., 200 (reprinting sketch from Duykinck's "Cyclopedia of American Literature," III, 97, followed by two pages of testimonials); John D. Philbrick, "Henry Barnard—the American Educator," 4 N. E. Mag., 445 (May, 1886, reprint from Mass. Teacher for January, 1858); James L. Hughes, "Henry Barnard, the Nestor of American Education," N. E. Mag., N. S., XIV, p. 560 (1896), with illustrations showing Barnard at the ages of 43 and 82); Samuel Hart, "Henry Barnard," N. E. H. G. Reg., vol. 56, p. 173 (April, 1902). A short sketch is printed in Steiner's "History of Education in Connecticut," p. 45. All statements of fact in this work, not verified by footnotes, are based upon the manuscripts in the Barnard collection contained in the Watkinson Library in Hartford.

Chapter II.

TEACHING, TRAVEL, AND LAW (1830-1837).

After graduation the enthusiastic, restless youth, taking President Day's advice, taught school for a year. He was employed in Wellsboro, Tioga County, Pa., in an institution which he said was more like a district school than an academy.¹ He found the practical experience gained there valuable, and often said² that "we are not sure of our knowledge of any subject until we have succeeded in making ourselves vividly and thoroughly understood by others on that subject." He always advised a young man to teach for a year, "as the best way to settle in his mind what he had learned," and it is interesting to reflect that this year's instruction was the only systematic work of teaching in any institution in which Barnard ever engaged. He was given \$75 by his father, when he started for Wellsboro, and noted in his account book, when he reached that place: "I ought to have on hand \$50.19, but I have only \$48.75; so that I have lost, been cheated, or forgot to charge \$1.44." He agreed with a landlady that she should "board, victual, and lodge me" and also do his laundry—all for \$1.50 a week. After a little while he records that she raised her price to \$2. Before he returned to Hartford he managed to make a tour to Auburn, Ithaca, Niagara, and Rochester.

When he came home he flung himself into politics as an ardent Whig, meanwhile spending part of his time in reading law with Wyllys Hall, of New York, and William H. Hungerford, of Hartford.³ These legal studies continued until he was admitted to the bar in the winter of 1834-35. During these months,⁴ however, politics and law did not occupy all his time. He habitually "devoted two hours daily to Kent and Blackstone and the rest of the time to Bacon, Gibbon, Warburton, Burke, Barrow, and Taylor, and read a little Homer, Virgil, or Cicero, as President Day had advised the graduating class." At some time during this period he spent several months in Amherst, Mass., gaining an increased love for hill country and nature in general, so that he wrote, quoting from Milton's Essay on Education: "In these vernal seasons of the year, when

¹ Monroe, 10.

² 1 Am. J. Ed., 665.

³ Norton, p. 126.

⁴ 1 Am. J. Ed., 665.

the air is calm and pleasant, it were an injury and sullenness against nature not to go out and see her riches and partake in her rejoicings with heaven and earth."

Barnard's anti-Jackson sentiments led him to make a strong address before the National Republican Young Men of Hartford County in 1831, and to go to Baltimore as a delegate to the National Whig Convention. In the next year he addressed the State convention, and, taking an active part in the presidential campaign, went to Providence to ask Henry Clay to come to Hartford.

In the winter of 1832-33 Barnard interrupted his legal studies to spend January and February in Washington, where he ate in the mess of the Connecticut delegation to Congress and listened to the "stormy and eloquent debates" of that session.⁵ From Washington, he wrote Dr. John Todd, on February 11, 1833, that he feared that Clay had gone too far in his compromise tariff. "Nullification, when carried out, is simply treason." The young politician characterizes the orators he hears: Webster's "deep, awful voice made my blood freeze." Calhoun spoke—

with inconceivable rapidity and energy and with a very dictatorial air. His language is sinewy and his periods generally short. He is endowed with a very acute intellect. His figure is gaunt, his eye bright, or rather keen and wild, and his features, when in repose, exhibit great decision of purpose. He looks very much careworn.

Of Jackson's famous Proclamation of January 16, and Calhoun's reception of it, Barnard wrote his brother Chauncey:

This morning the President sent a message to both Houses of Congress covering the Proclamation and the Documents of South Carolina. The reading of it occupied over an hour, and as you will receive it by this mail, I will not comment on it. As far as I could see, there was no abandonment of the former ground taken by the President, and I am rejoiced at that. I never saw a man under such excitement as Mr. Calhoun was, when he addressed the Senate after the reading of the message. His quick, restless eye glittered like fire; every muscle of his face was rigid, except those about his lips, which quivered with suppressed passion. Language seemed to sink beneath him; he could not find words to express the strength of his feelings. He rose, he said, to give a prompt dismissal to the assertion of the President that South Carolina wanted to break up the Union; alluded most cuttingly to the doctrine of the message that the judiciary must decide on all cases of constitutionality of the tariff law. How is this, that a narrow stream that divides Georgia from South Carolina should make all this difference. On one side, the supremacy of the judiciary was to be maintained, and on the other trampled under foot.

A month later, on February 16, writing his brother again, Barnard thus described Webster's great speech on the Constitution:

I write only to-day that the battle has been fought and won. Calhoun continued about two hours this morning. The moment he had concluded Webster

⁵ Barnard's Journal letters to his brother Chauncey have recently been printed in the *Maryland Historical Magazine* for September and December, 1918.

caught the last word of his speech and pronounced it in a way that thrilled like electricity through the whole house. He spoke about two hours—the Senate took a recess till 5—and he then resumed and spoke three hours longer.

Upon the whole it was the most overwhelming argument I ever heard or expect to hear. It will go down with the Constitution as true exposition of its meaning and principles. He ground the whole argument of Calhoun to powder. It will really require a microscope to discover the atoms. Calhoun will continue the debate, but he might as well bow himself on one of the pillars of the Capitol and attempt to pull it down; he can't do it.

The closing remarks were splendid, and drew forth an involuntary burst of applause, although it had been positively announced that in the case of any disturbance the galleries would be cleared immediately.

He made the blood thrill by his tremulous call on the people to come to the rescue.

The disagreement of Webster and Clay over the compromise tariff is described in a letter written on February 21:

The mail closed last evening before the Senate or the House adjourned. Both were the theaters of intense excitement. In the former Webster assailed the general principles of Clay's bill in a speech of three hours, full of strong and unanswerable argument, carefully avoiding anything of a personal nature. Clay replied in a speech of nearly two hours, but did not and could not overthrow the position which Webster took. He concluded with the most splendid outburst of eloquence I have heard from his lips. It was overwhelming. There is a brief sketch in the *Intelligencer* of this morning of this debate, but it gives you no idea of it as heard. I can not believe but what Clay is actuated by the purest and loftiest feelings of patriotism, but what he is anxious of pouring oil upon the agitations of the country. Clay was in several places very unkind and personal toward Webster; taunted him with his new-born zeal for the administration. It was expected that Webster would answer in the evening, but the Senate adjourned rather unexpectedly, on the motion of Mr. Clay, who was informed that his bill had been introduced by way of amendment to Verplanck's bill and passed in the House to a third reading after a debate of two hours. This move obviated an objection made by Webster that the Senate had no right to originate a revenue bill. The Senate will not go on with its present bill, but take up the one from the House as soon as it is read a third time, which will probably be to-day. One week ago there was little hope that any bill would pass the House this session; now it is confidently believed that a tariff, the Land and Enforcing bill, will pass. Calhoun is expected to answer Webster to-day.

Calhoun spoke more than two hours in support of his resolutions, in answer to Webster's argument, but he neither supported the one, nor overthrew the other. Webster replied in a speech of about one hour, exhibiting but little feeling; he laid a hand of iron, however, upon Mr. Calhoun. Clay's bill passed the House this morning and will come up in the Senate to-morrow and pass.

Barnard's opinions of other lawyers and political leaders are of interest. For example, on one day, he—

walked up to the Capitol, first into the Supreme Court room; saw there Mr. Binney, of Philadelphia, one of the best looking [men] now assembled in this city, a large frame and ample brow; by his side was John Sergeant, a much more diminutive man, but very intellectual looking. I had an introduction to him, found him easy and familiar on all subjects; had a seat assigned

me on the floor of the House to-day, on the ground of reporter, that is, letter writing; well, that is not a large tax to pay for the privilege of hearing distinctly and the opportunity it affords for conversation with the Members.

Mr. White, of Louisiana, spoke on the tariff. He is French by birth, full of motion, and after he gets a-going is wrapt up into third heaven. He uses beautiful language and is an acute reasoner, although the brilliancy of his fancy blinds as to that. He was followed by Mr. Poik, from Tennessee, a would-be leader of the administration in the House. He is a very easy debater and presented some very strong arguments for reduction—showed from information collected by the Secretary of the Treasury that the manufacturers of woollens and cottons were making from 15 to 40 per cent.

Barnard saw something of the social life of the capital. He went to a party at the Seaton's on Monday evening.

I went and was ushered into the front room, where the Mr., Mrs., and the Miss Seaton's were ready to receive you. You pass the compliments of introduction and, if you can sustain the shock, you chat a little with the madam and her daughters and then join the dance, which is going on in the adjoining room, or the conversation parties, or little knots in the room which opens from the aforesaid by folding doors. The dance is kept up by some of the parties till 11 or 12 or 1, and always terminates with waltzing—a very graceful but voluptuous dance, in which a lovely figure is displayed to the best advantage. Through the whole evening, servants are constantly passing wine, lemonade, punches, ice creams, cakes of several kinds, jellies and, to end the whole, a supper is spread upstairs, and, I should add that, in some of the rooms, card tables for amusement are to be found. To these set parties from 150 to 300 are present, comprising all the great men and lovely women of the city.

He also attended a reception at the French minister's, and of course, went to the White House, thus describing his experience there:

Last evening the President had what is called a drawing-room or levee. You understand the arrangements of the White House. Company begins to throng in about 7.30, or perhaps a little earlier. You are ushered into a large ante-room, where you unrobe yourself and then advance into the reception hall, a round room of considerable size, hung round with rich curtains. Near the center of this stands the President, who shakes hands with all as they are introduced to him by his friends.

He looks much more firm than I expected to find him. His hair is gray, but very thick, and stands up erect on his head. He was dressed in a plain suit of black, and there was nothing about him to distinguish him from an ordinary old gentleman. He wore glasses and shook his particular friends with both hands. Blair and Hill, and other worthies of that stamp, were moving about in this room. After this presentation, the company shift for themselves. They move off gradually into the East Room, which you know is splendidly furnished. The four mirrors, two at each end of the room, are the largest in this country. They would cover our room. The rich crimson, golden, and sky-blue hangings of the windows produce a grand effect; and the broad strip of cornice round the top of the walls is exquisitely wrought. The sides of the room are lined with rich, mahogany-cushioned chairs and sofas. In this room, in the course of the evening, were assembled more than 2,000 people, and, at any point of time I presume there were more than 500 or 600. The company sweep around, arm

in arm, all the evening. In the first half hour I took my station with two or three friends at one corner, and surveyed the army of beauty and fashion, and talent and ugliness, and shabbiness and dullness, as it poured by in a living current. After that I moved round myself in the stream of the dozen counter-currents and eddies that set up and swept in from four different directions. At one time with a Virgilian, at another with a Marylander, and still another with an Ohio *beauty* on my arm. Think of that.

The president is extremely penurious. He did not furnish the company with coffee, or wine, or music; nothing but his own hard, dry features. He says he is not going to be beggared by *cheerity*.

The company—and it was an odd assemblage from every section of this country—dispersed about 11.

Friends took him to the convent at Georgetown and to Georgetown University, a visit to which latter place he thus described:

We walked out to the college, met a jolly-faced, big-bellied man dressed in a cassock (a black gown like, belted around the body) with a blue cap, fashioned like a miter on his head, who proved to be the president, Rev. Thomas F. Mulledy, who invited us into his room, and making known our errand he took us into the library, containing about 15,000 volumes. Saw a manuscript there written out on parchment in 1240, nearly 800 years ago, as fresh and as beautifully written as though it was done yesterday. I could hardly believe my senses. Saw different specimens of printing, from its first invention down to the present time. Saw what is called the illuminated manuscripts; that is, large letters gilded, as we should call it. Saw a splendid copy of *Don Quixote* in 4 volumes, quarto, full of spirited engravings. Went into the museum, which contains the largest electrical machine I ever saw. The jolly old president tried an experiment with me by putting into my hand a vessel charged with gas and then exploding it by communicating with the machine. Saw a piece of a negro's skin tanned; it was as thick as calves skin. The chapel is all hung round with splendid paintings by old artists and are all calculated to impress the great points of Catholic faith upon young minds. When we went into the chapel I noticed the face of our worthy guide materially elongate as though he was treading upon sacred ground. The sleeping rooms extend through two stories, in which there are 70 beds each, separated by their partition of cloth; the rooms are well aired, however.

Attached to one of the buildings is an infirmary, in which each complaining has a neat room; there is a common room for amusement and long halls to walk in; then every portion of the building is decorated with paintings and engravings, presents from great characters in Europe. The discipline of this college is very strict, and were it not for its Catholicism, would be a very eligible situation for a youth from 12 to 17. The situation of the college is delightful; I can't imagine anything finer, the grounds around—and they extend up a valley a half mile—are beautifully laid out into walks, and the southern exposure of a hill, embracing 5 or 6 acres, is planted with a vineyard.

At the beginning of March he left Washington by steamboat for Norfolk, and went thence up the James to Richmond. After a short visit there he traveled to Petersburg, whence his friends, the Campbells, took him to Shirley, the seat of the Carter family. The impression of the plantation life of a large planter, made on this young New Englander, is most interesting.

I think you would delight to visit this region, merely to observe the difference of manners and habits from what you have been accustomed to; aye, and to experience the princely hospitality of the *gentle-born* families. For the last week I have had a succession of feasts. I accompanied Mrs. Campbell, who is one of the most devoted mothers and well-educated women I ever met, and her daughter, Miss Betty, a beautiful, sprightly, accomplished girl, to Shirley, the seat of the Carter family. Mrs. Carter is of a high and wealthy family, and is one of the plainest, most unassuming women you will meet anywhere. Now, that you may understand how we lived there and how one of these large establishments is carried on, I will describe a single day there. I will suppose also that it is a day upon which company is expected, etc.

When you wake in the morning you are surprised to find that a servant has been in, and without disturbing you built up a large fire, taken out clothes and brushed them, and done the same with your boots; brought in hot water to shave, and indeed stands ready to do your bidding. As soon as you are dressed, you walk down into the dining room. At 8 o'clock you take your seat at the breakfast table of rich mahogany, each plate standing separate on its own little cloth. Mr. Carter will sit at one end of the table, and Mrs. Carter at the other. Mrs. C. will send you by two little black boys as fine a cup of coffee as you ever tasted, or a cup of tea—it is fashionable here to drink a cup of tea after coffee. Mr. Carter has a fine cold ham before him of the real Virginia flavor; this is all the meat you will get in the morning, but the servant will bring you hot muffins and corn batter cakes every two minutes; you will find on the table also loaf wheat bread, hot and cold corn bread.

After breakfast, visitors consult their pleasure—~~if~~ they wish to ride, horses are ready at their command; read, there are books enough in the library; write, fire and writing materials are ready in his room. The master or mistress of the house is not expected to entertain visitors till an hour or two before dinner, which is usually at 3. If company has been invited to the dinner, they will begin to come about 1—ladies in carriage and gentlemen on horseback. After making their toilet the company amuse themselves in the parlor; about a half hour before dinner the gentlemen are invited out to take grog. When dinner is ready (and by the way Mrs. Carter has nothing to do with setting the table, an old family servant, who for 50 years has superintended that matter, does all that), Mr. Carter politely takes a lady by the hand and leads the way into the dining room, and is followed by the rest, each lady led by a gentleman. Mrs. C. is at one end of the table with a large dish of rich soup, and Mr. C. at the other, with a saddle of fine mutton; scattered round the table—you may choose for yourself—ham, beef, turkey, duck, eggs with greens, etc., etc.—for vegetables, potatoes, beets, hominy. This last you will find always at dinner; it is made of their white corn and beans and is a very fine dish. After you have dined, there circulates a bottle of sparkling champagne. After that, off pass the things and the *upper* tablecloth, and upon that is placed the dessert, consisting of fine plum pudding, tarts, etc., etc.; after this come ice cream, West India preserves, peaches preserved in brandy, etc. When you have eaten this, off goes the second tablecloth, and then upon the bare mahogany table are set the figs, raisins, and almonds, and before Mr. Carter are set two or three bottles of wine—Madeira, port, and a sweet wine for the ladies—he fills his glass and pushes them on; after the glasses are all filled, the gentlemen pledge their services to the ladies, and down goes the wine; after the first and second glass the ladies retire, and the gentlemen begin to circulate the bottle pretty briskly. You are at liberty, however, to follow the ladies as soon as you please, who after music and a little chitchat prepare for their ride home.

From Petersburg the railroad took Barnard to Belfield, and then by stage he went to Halifax and Raleigh. Letters of introduction and meetings with classmates, for the most part southern men who had gone to Yale, gave him pleasant entrance into society, and in general he was pleased with all he saw. He was the guest for several days of Dr. Caldwell, president of the University of North Carolina, at Chapel Hill, and passing through Hillsboro and Greensboro, visited very delightfully a friend, Dr. Ashbel Smith, of Salisbury. After seeing the gold mines, not far from there, he went on by stage through Charlotte, Lincolnton, and Morganton, to Asheville. He found the "scenery very imposing," but thought he had not enough time to go farther into the mountains and passing through Greenville and Pendleton, S. C., arrived at Augusta, Ga., about April 25. Friends here again made his stay a pleasant one, but he quickly left by steamboat for Savannah. From Savannah he went on to Beaufort, S. C., where he—

was served with the most delicious luxury I ever met with, and that was a dish holding 4 or 5 quarts of large, ripe strawberries, a dish of sweet cream, and a bowl of fine white sugar. I never tasted anything so very fine. They have had strawberries for three weeks. I should have said that peas were up at dinner in Savannah and on board the boat yesterday. I got up early on Monday morning and went to market. I there saw in the greatest abundance green peas, new potatoes (rather small), beets, turnips, etc., blackberries, and strawberries; of the latter I made a purchase and ate them on the spot, not thinking that I should have such a luxury as I was blessed with in the evening of the same day. This is the first time in my life that I have tasted of strawberries and green peas in April.

Beaufort is a beautiful place, very quiet—no commercial business going on here; but planters whose estates lie among the islands—the famous Sea Islands cotton plantations—have their plantations here. These plantations yield an enormous income. Several planters in this district enjoy a fortune, \$10,000 to \$70,000 a year, and yet they complain of hard times. The district of Beaufort is probably the richest in the United States, excepting the great commercial cities. The climate in the winter season is delightful, resembling that of the south of France.

Another stage ride carried Barnard to Charleston where he received hospitality from Robert Barnwell Smith, Thomas S. Grimké and others, and whence he took passage in a sailing vessel for Norfolk. A steamboat thence brought him again to Petersburg, and, on May 21 he had returned to Richmond. His final excursion was into the Shenandoah Valley. He went first to Charlottesville, where he visited the University and Monticello, and then, after a stop at Gov. Barbour's, a letter from Grimké gave him hospitality at Montpelier. It is pleasant to find that President Madison made so strong an impression upon the young man. Of the visit he wrote:

Mrs. Madison came to me. I knew her from the portrait I had frequently seen. She is quite a large woman, about 50, and even now extremely beautiful. I presented her the letter; she invited me in; conversed with me a while;

then took the letter to Mr. M. After showing the beauties of the prospect around, she took me to Mr. M.'s room, and introduced me. Mr. M. was lying on the bed; he shook me very cordially by the hand; spoke in a very firm voice. I felt as though I was in the presence of a *patriarch*. He is, you know, 80 years old; his eye is bright; his voice firm; and his face scarcely wrinkled, though his cheeks are fallen. He has been confined to his house for nearly two years, by a diffusive rheumatism. His health is very much better. He walks about the house a good deal. After conversing with him for nearly an hour, I made a move to depart, but they would not hear to that, and, come to look, my horse had already been put in the stable.

I spent the whole evening, until nearly 10 o'clock, in his room, highly entertained and interested by his conversation. I took a glass of his rich old Maderia; shook hands with him as I went to bed. We did not get up till 7, and Mr. M. had been to breakfast. Mrs. M. and myself sat down to the table; fine coffee, cold boiled ham, warm and cold bread, and tea constituted the repast. Mrs. Madison is a very interesting lady, and her manners are the most sweet, graceful, and dignified I ever saw. She is almost worshiped by her friends, and loved by those who see her once. She showed me all over the house, the busts of nearly all our great men, four portraits by Stuart. The walls of every room are hung with paintings and engravings.

It rained in the morning and, as the weather was unsettled, they would not hear of my leaving. I spent three hours in Mr. M.'s room. He conversed with great ease, and expresses himself with inimitable clearness and precision on every subject.

My visit to Mr. Madison was worth the whole expense of my journey.

On horseback, Barnard then rode to Staunton and Lexington and from the latter place made an expedition to the Natural Bridge and the Peaks of Otter, both of which greatly impressed him. Turning thence northward, he descended into Weyer's Cave and reached Harpers Ferry on Sunday, June 8. From that place he journeyed through Frederick, Baltimore, Philadelphia, and New York, and was home in about a week. In those days, the trip was sufficiently unusual to give the traveler a breadth of vision not possessed by the average man.

In the year 1833, Barnard also visited Boston. In July he delivered an address before the Connecticut Branch of the American Colonization Society in the Centre Church at Hartford upon "Education and Liberia,"* in which address he emphasized the importance of schools to Liberia, not only to "its ultimate success, but even to prevent it from being swallowed up in the barbarism of a continent." Some time before this he had become a member of a debating club, which met over Humphrey & Sage's store, before which club he made his first public speech in favor of educational freedom and equality of women.⁷ Out of this club, largely through Barnard's suggestion, came the plan for Hartford's Bicentennial Celebration, but the celebration occurred while Barnard was in Europe, and was marked, according to Barnard, by a "very unhistorical address

* 28 Am. J. Ed., 228.

⁷ N. E. Mag., N. S., XIV, 565, 1896.

by Dr. (Joel) Hawes, who, with all his earnestness and pungent discourse, did not have the historic sense." In the beginning of 1835, when Daniel Wadsworth was considering the establishment of the Wadsworth Athenæum in Hartford, on similar lines to the Trumbull Gallery in New Haven, Barnard suggested that the athenæum include not merely a gallery of art, but that the ground floor of the building be used for the accommodation of the Hartford Library Association, as a library of reference and of circulation and a special local collection of books. This suggestion was accepted and the result was of great permanent value to the city.

During the academic year 1833-34, Barnard was a student in the Yale Law School. In the summer of 1834^{*} he went to Maine and took a driving trip from Bath to Bangor. Between his extended trips he took short journeys through Connecticut from time to time, equipped with such books as Barber's Historical Collections, Field's Middlesex County, or Morris's Litchfield County.

The Young Men's Whig Association, of Hartford, asked him to make an Independence Day address in 1834. He declined to make a political speech, but agreed to make a patriotic one, which was delivered at the North Congregational Church. In the following December, he spoke in the North Baptist Church, of Hartford, before the Connecticut Peace Society," showing that the "weight of universal, popular intelligence," favored "the settlement of international differences before war was declared," and demanded "the arbitration of neutral powers before appealing to brute force."

Early in 1835 Barnard took a western trip, and Rev. T. H. Galaudet, the noted educator of the deaf, wrote him from Hartford to Cincinnati, urging him to make a profession of faith in Christ and to avoid the dangers of travel. Immediately on his return to the East, he sailed for Liverpool, on the ship *England*, and arrived there on April 18, 1835. He visited Chester, Birmingham, Coventry, Kenilworth, Warwick, Stratford, Gloucester, Ragland, Monmouth, Bristol, Bath, and Salisbury, as his account book shows, and arrived in London in time to eat a fish dinner at Greenwich on May 6, and to attend a Peace Congress, as a delegate from the American Peace Society. While in England's metropolis he attended lectures at the Mechanics' Institute, heard Lord Brougham in the House of Lords, and on May 17 listened to Madame Malibran singing in Somnambula, at Regents' Park. He had provided himself with letters of introduction,¹⁰ and after he had seen the Epsom Races and had gone to Woolwich, Richmond, Brighton, and Chelsea, he started northwards, presenting these letters as he found opportunity. He met Lord Brougham,

^{*} He says 1835, but this is impossible, and no other year can be substituted.

⁸ 28 Am. J. Ed., 228.

¹⁰ Vide letter of Edmund Smith (Rhett), a classmate, written in Charleston on Mar. 10.

whom he had long admired and discussed with him the best agencies for securing universal education as a foundation for good citizenship. Others whom he met were Chalmers, Carlyle, De Quincey, Wordsworth, Lockhart, and Coombe.¹¹ In the day spent with Wordsworth, the poet urged him never to lose his love for nature. He visited Hull, York, Kendall, Carlisle, Selkirk, Abbotsford, Melrose, Edinburgh, the Trossachs, Oban, Staff, Crinan, Glasgow, and crossed the Irish Sea to Belfast and Dublin. Thence, returning by Holyhead, he visited Bangor, Oxford, and Windsor, and was again in London on July 10. Crossing to the Continent with equally rapid pace, he visited Antwerp, Brussels, Liege, Aix la Chapelle, Cologne, and Bonn, arriving there on August 6. Going up the Rhine, with stops at Coblenz and Mainz, he visited Wiesbaden, Frankfort, and Heidelberg, where he was on August 27. Thence he traveled through Baden to Lucerne, Zug, the Rigi, Sarnen, Interlaken, Bern, Lausanne, and Geneva, where he met the Count de Selon. Mr. William C. Woodbridge and Dr. Todd had told Barnard of Pestalozzi's methods, and Barnard visited him and his school at Yverdon, in Switzerland, in which country he also saw Fellenberg and Hoffweil, and so increased his acquaintance with educators. On he went through Brieg, Avona, Milan, Brescia, and Venice. Then he turned northward through Trent, Munich, Vienna, Prague, Dresden, Berlin, and Hamburg. Westward then he journeyed to Amsterdam, Leyden, and Rotterdam, and arrived in Paris on December 7. There he lived for some time with Forrest, the actor.¹² He had a plan to spend some months in Germany in the study of civil law, but news of the failing health of his father¹³ caused him to give up this scheme and to devote himself to the general objects for which travelers seek. He enjoyed the scenery, visited the picture galleries, and, going south through Marseille, reached Italy again at Leghorn. He traveled through Genoa, Pisa, and Florence to Rome, where he met Baron Bunsen, and, finally, he embarked for America at Naples, on May 10, 1836. On his return to Hartford in July, he found his father ill and, from that time, until his father's death in March, 1837, his home duties prevented him from active correspondence with friends. He watched by his father's bedside a portion of every night and day and occupied his leisure in reading about the countries he had visited. As a result of the "grand tour, more than ever," he was "deeply impressed with the necessity on every citizen of cultivating and practicing a large public spirit and of basing all our hopes of permanent prosperity on universal education."¹⁴

¹¹ *N. E. Mag.*, N. S., XIV, 565.

¹² *N. E. Mag.* N. S., XIV, 565.

¹³ *1 Am. J. Ed.*, 666.

¹⁴ *1 Am. J. Ed.*, 666.

Chapter III.

MEMBER OF THE CONNECTICUT LEGISLATURE (1837-1840).

At 26 years of age Barnard had not yet found his career. He had rare advantages. His personality was pleasing, his bearing dignified, his culture remarkably varied. To a collegiate education at Yale and a legal training he had added a remarkable knowledge of literature. In a time when men did not travel far he had already been a wide traveler, having seen most of the United States east of the Mississippi and having made the grand tour of Europe. At his father's death he had inherited a small competence. He had achieved some little reputation as a speaker, manifested considerable interest in education, and had been admitted to the bar. Whither should he bend his efforts? To politics, education, or to law?

While he was thus balancing the matter, without effort of his part the Hartford voters chose him in 1837 as one of their two representatives in the general assembly. He was the youngest man they had ever chosen, and their continued confidence showed itself by reelecting him yearly until 1840. He was well equipped by nature and training for the office. Horace Mann said a few years later that Barnard was a man possessing "fine powers of oratory, wielding a ready and able pen, animated by a generous and indomitable spirit, willing to spend and be spent in the cause of benevolence and humanity."¹

At first thought the election of Barnard to the general assembly would have seemed to direct his career toward politics. He took interest in many affairs, such as the education of the deaf and blind, the completion of the geological survey, the amelioration of the condition of the poor, the care of the insane, the improvement of jails, the incorporation of libraries.² On May 23, 1837, in his first session, he delivered an address which was printed in pamphlet form upon a proposed amendment to the constitution of the State limiting the tenure of office of the judges of the supreme and superior courts. This speech, which shows great learning and historical research, strongly opposes the assignment of fixed terms of office to the judi-

¹ 4 N. E. Mag., 445, from Mass. Teacher for January, 1858.

² Monroe, 11.

ciary, instead of appointing them for life or good behavior. Barnard maintained that the change would virtually destroy the efficiency of the judiciary as a separate and coordinate department of government, and that, after such a change, neither would it be possible to secure good judges, nor would the judges longer be a restraint upon the legislature.

Once introduce this seminal principle of mischief into our constitution, break down the independence of the judiciary, let this evil spread through the land, and farewell forever to the pure, firm, and enlightened administration of laws. The foul spirit of party will enter into your jury box and dictate its verdict. It will clothe itself in the ermine of the judge and pronounce his decisions, and the temple of justice that has thus far been preserved from its unholy touch will be utterly and forever deserted.

Barnard was also active in Hartford's municipal life during this period. The Connecticut Historical Society had been founded in 1825, but had become inactive, because of the removal of the Rev. Thomas Robbins and others of its founders. Barnard made the first suggestion for a revival of the society,³ and conducted all the "incipient correspondence concerning the matter." When the reorganization took place in June, 1839, Barnard was made corresponding secretary. In his efforts to secure members, he read a circular, asking men to join the society, before the Connecticut State Lyceum, at its meeting in Middletown on November 13, 1839, and then distributed it in slip form in the Connecticut School Journal. He continued as corresponding secretary until May, 1846, and, in later years, he served the society as president, after the death of Hon. Thomas Day, from 1854 to 1860, and as vice president, from 1863 to 1874. To him, also in large measure, was due the securing of Rev. Dr. Thomas Robbins as librarian for the society. For the Young Men's Institute, Barnard secured the valuable collection of books belonging to the Hartford Library, which went out of existence about the same time. The general assembly met in New Haven in May, 1838, and during its sessions⁴ Barnard returned to Hartford to read a paper before the American Lyceum, which was then meeting in that city at the invitation of the Rev. T. H. Gallaudet. The interest aroused by that lecture was largely instrumental in the founding of the Young Men's Institute, of which Barnard was chosen first president.

We have no record that he ever spent much time in the practice of law, but he was still somewhat occupied with literature, and, in 1838, was asked by Rev. J. G. Palfrey, the editor of the North American Review, to prepare therefor a review of Hinman's work on Connecticut.

³ 1 Am. J. Ed., 663.

⁴ 28 Am. J. Ed., 229.

He found time to travel somewhat outside of the State, and, in 1838, called on President Van Buren, to ask him to secure school statistics in the Census of 1840. In after life he was proud of saying that he had known all the Presidents except three. His political life was, however, soon ended. He took no part in the canvass for the presidency in 1840, and, among his papers, I found no record of his even attending a political meeting after this time except that, in 1843, he listened to Webster in Saratoga and, at some time, to Gen. Taylor in New Orleans.

His career had been determined for him and the educational interest was to dominate the remainder of his life. A Hartford man who knew Barnard in his later years said that his influence in the community in which he lived, as well as in the State and the Nation, was analogous to that of yeast, that he brought among his fellow men new ideas, which produced such fermentation that the old self-satisfied conditions could no longer continue, but that men must press on to new and improved positions. The comparison is an apt one, and the observant eye and fertile mind of the young man caused him to send forth, as we have already seen, many new ideas among the people. This is especially true of the period in his life of which we now write. In 1837, Judge George Sharpe, of Abingdon, who had been in the previous legislature, but was not in this one, asked Barnard to introduce for him two measures in which he was interested. One of these was a bill for the more thorough local visitation and inspection of the schools by paying the school visitors, and the other was a resolution to secure from the comptroller official information as to the common schools of the State. Barnard gave aid in vain, for the measures were not passed.⁵ In the next year Barnard widened the scope of these measures and introduced a bill "to provide for the better supervision of the common schools." The bill was referred⁶ to the joint select committee on education, and, when reported favorably by them, the rules were suspended and the bill passed unanimously to a third reading on a motion made by R. M. Sherman. After the bill passed the house, the senate also passed it unanimously and the governor signed it. The passage was insured by Barnard's faithful efforts and especially by a speech which he made in the house.⁷ For a month before the assembly met, Barnard had been occupied in visiting schools and conferring with parents and teachers.⁸ Following the line of least resistance, he had provided for a board whose whole duty⁹ "may be summed up in the com-

⁵ 54th Meeting Am. Inst. Instruction, 112; 28 Am. J. Ed., 227; 22 Am. J. Ed., 339.

⁶ Monroe, 11.

⁷ 1 Am. J. Ed., 660.

⁸ 5 Am. J. Ed., 152.

⁹ Rept. of U. S. Commis. of Ed., 1896-97, I, p. 779.

prehensive title: A ministry of education in behalf of the people's common school under the direction of the State," but "without power to make any change in the system."

To prepare men's minds for his bill, he had addressed a circular describing his intention to each member elected. The bill provided for a State board of commissioners of common schools, consisting of eight members, with a secretary of the board to be chosen by them. He had found that "any measure, calculated to disturb the relations of political parties, by giving to the minority the slightest chance for crying increased taxation or that suggested a suspicion of diminishing the dividends of the school fund, had not the slightest chance of success." He had accordingly framed his bill so as to avoid shipwreck upon these points. He felt that conditions in the State were very bad:

Our district school had sunk into a deplorable condition of inefficiency and no longer deserved the name of common in its best sense, that there was not one educated family in a hundred that relied on the district school for the instruction of their children, and if they did go, the instruction was of the most elementary character. All the higher education of the State was given in denominational academies and irresponsible private schools of every degree of demerit."

It has been said with much truth "the radical difficulty in Connecticut was that, for a long time, the educational training had been switched off from the direct track of a public interest, dealt with in the forum of the town meeting, to the side track of a school society."¹¹

Already had Barnard conceived the idea of writing a book upon the school systems of Europe, which he had studied on his travels. Unusually well equipped for the advocacy of any forward step in his speech before the house, he pointed out the "gradual departure" of Connecticut "from the fundamental principles of the old system, as well as our failure to meet, by better educated teachers and a more scientific cause of instruction, the exigencies of increased population and wealth and of diversified industries."¹² He also discussed the question of attendance; of the itinerating and nonprofessional class of teachers; of the absence of constant, intelligent, and skilled inspection; and of inadequate and defective modes of support. In this speech¹³ Barnard proclaimed the great truth that:

It is idle to expect good schools until we have good teachers. * * * With better teachers will come better compensation and more permanent employment. But the people will be satisfied with such teachers as they have, until their attention is directed to the subject and until we can demonstrate the necessity of employing better and show how they can be made better, by appropriate training in classes and seminaries established for that specific purpose.

¹⁰ 28 Am. J. Ed., 227.

¹¹ Rept. U. S. Commis. of Ed., 1896-97, I, p. 777.

¹² 28 Am. J. Ed., 228.

¹³ 1 Am. J. Ed., 600; 10 Am. J. Ed., 24.

Barnard definitely dedicated himself to the work of school improvement in this speech, saying:

Here in America at least, no man can live for himself alone. Individual happiness is here bound up with the greatest good of the greatest number. Every man must at once make himself as good and as influential as he can and help at the same time to make everybody about him and all whom he can reach better and happier. The common school should not longer be regarded as common, because it is cheap, inferior, and attended only by the poor and those who are indifferent to the education of their children, but common as the light and the air because its blessings are open to all and enjoyed by all. That day will come. For me, I mean to enjoy the satisfaction of the labor; let who will enter into the harvest.¹⁴

From that dedication of his life to education, Barnard never receded. He had the satisfaction of abundant labor, and before he died he enjoyed the first fruits of the harvest, upon which the people still feed and are filled. In all the schools of the State the teacher lacked knowledge¹⁵ and "practical ability to make what he does know available"; while he had never studied the "creative art" of the teacher. Barnard believed that publicity given to these facts would cause the eventual establishment of a normal school, and then, as always urged, "Let us have light upon the whole subject of teachers."¹⁶ In the next week, after the adjournment of the house, as president of the Hartford Young Men's Institute Barnard explained the plan of operation of that organization to an audience assembled in the Center Church on the evening of Independence Day. So impressive did this address¹⁷ prove that he repeated it in the Fourth Church in Hartford, and in New Haven,¹⁸ Norwich, New London, Middletown, and Norwalk, developing it into a lecture on the moral and educational wants of cities. In this form the program covered five points: The first was the establishment of a house of reformation for juveniles; then followed the care of the poor, by furnishing employment, instead of indiscriminate charity, and by personal intercourse "awakening in their minds a self respect and force of thought to bear up and rise above the adverse circumstances of their lot." These ideas foreshadowed some of the important features of the modern charity organization societies. He also advocated the erection of model tenements. His third suggestion too, was one followed out in the twentieth century, namely, the giving the people "more abundant means of innocent and rational amusements." Fourthly, Barnard urged the establishment of graded schools, as follows: (a) Primary schools, with the "teachers all fe-

¹⁴ Rept. U. S. Commis. of Ed., 1896-97, I, 777: 4 N. E. Mag., 446.

¹⁵ I Am. J. Ed., 668.

¹⁶ If the bill was adopted and sustained for 10 years he said there would be a normal school established within the time.

¹⁷ 28 Am. J. Ed., 229.

¹⁸ Before the Young Men's Institute on Dec. 23, 1841.

males and the children below 8 years of age," which schools should largely be supervised by the mothers of the children; (b) secondary schools, comprising children from 8 to 12 years of age; (c) high schools for boys and for girls with education preparatory to the pursuits of commerce, trade, manufactures, and mercantile life; (d) departments for colored children; (e) evening schools for those employed during the day; (f) libraries containing also maps, globes, etc., each library to be sent around to each school of its class in turn. This last suggestion was a remarkable adumbration of the modern traveling library.]

The last of the items in Barnard's program for the progressive city was the establishment therein of lyceums, each of which should contain: (a) A library, embracing the widest range of reading for all classes, except the young who were to be supplied from the school library; (b) classes for debates and reading compositions; (c) classes for mutual instruction; (d) popular lectures separately given and also in courses; (e) collections in natural history; (f) a museum; (g) an art gallery. The comprehensiveness of this scheme is quite remarkable, as also is its emphasis upon the public library as an essential, integral part of public education.

[In 1839 Barnard was again chosen as a representative from Hartford to the general assembly and by that time he had also become secretary of the board of common school commissioners. He presented their report to the house, with a recommendation that an appropriation of \$5,000 be made, to be applied by the board of commissioners of common schools in promoting the qualifications of teachers. To this amount he hoped that considerable additions would be made by towns and individuals.] As chairman of the committee of the house to which the bill was referred, Barnard set forth the plan which he intended to recommend to the board of commissioners for common schools in the use of the sum appropriated, so as to improve the largest possible number of teachers, drawing some from every town and, in the course of three years, disseminating through all the schools of the State the better views and methods of teaching gained. The towns in each county should make proposals to furnish accommodations for the teachers assembled in this class and provide board gratuitously, or at reduced prices, for a limited period.) The teachers should be invited to meet in spring or autumn for—

mutually considering and solving, under the guidance of those selected to conduct the exercises, the difficulties which each had encountered in the elementary studies, or in the organization, class instruction, and discipline of the schools, and to receive from experienced teachers and educators their views on these topics, as extensively as the length of the session should allow.

On the other hand, the board should promise to secure the services of eminent practical teachers, in the several studies of the common school and in the science and art of teaching, and should also provide a course of evening lectures, calculated to interest and instruct parents and the public generally, which lectures should be open and free to all. He reiterated the need of better teachers:

Good teachers will make better schools, and schools made better by the labors of good teachers is [sic] the best argument which can be addressed to the community, in favor of improved schoolhouses, a judicious selection of a uniform system of textbooks in the schools of the same society, of vigilant and intelligent supervision, and liberal appropriations for school purposes. * * * Every good teacher will himself become a pioneer and a missionary in the cause of educational improvement.

(The amount asked would not be adequate to train teachers. It will not establish a normal school, but may bring together all teachers, for a week or more, "to attend a course of instruction on the best methods of school teaching and government." Teachers should be encouraged to form associations "for mutual improvement, the advancement of their common profession, and the general improvement of education and the schools of the State." They are the natural guardians of this great interest of the districts for all school purposes, to provide books for poor children, and to supply the schools with libraries and apparatus.)

(Barnard thoroughly appreciated the importance of public libraries.) The earliest library connected with a common school in Connecticut, selected in reference to teachers and pupils as well as to the graduates of the school, was founded by him. The first legislation suggested on the subject was that proposed in his report for 1839 and embodied in the bill he then introduced, in which a tax for library purposes was provided. He offered to give a certain number of books for a library in any district which should build a schoolhouse of which he approved. In an elevated strain he asked:

Who can estimate the healthful stimulus which would be communicated to the youthful mind of the State, the discoveries which genius would make of its own wondrous powers, the vicious habits reclaimed or guarded against, the light which would be thrown over the various pursuits of society, the blessings and advantages which would be carried to the fireside and the workshops, the business and the bosoms of men, by the establishment of well-selected libraries, adapted not only to the older children in schools, but to the adults of both sexes, and embracing works on agriculture, manufactures, and the various employments of life.

In 1841, Barnard praised New York's school library system. (He regretted that Connecticut had none, and recommended that a traveling library be placed in each school society, the books being contained in as many cases as there were school districts, and each case being allowed to remain six months in every district in turn; "at least

they are the cooperators with parents, in this work of educating the rising generation to take the place of that which is passing off the stage." If the appropriation be granted, it "should create in teachers a thirst for something higher and better than a temporary course of instruction, and the establishment of an institution for the professional education and training of teachers would follow." Barnard was hopeful and exclaimed: "Though the prospect is dark enough, I think I can see the dawning of a better day on the mountain tops." His prophetic eye looked forward to a time when "young children will be placed universally under the care of accomplished female teachers; female teachers will be employed in every grade of schools as assistants and, in most of our country districts, as school principals," in "new, attractive, and commodious structures." Town or society high schools will be established. In his lofty conception, teachers were "a chosen priesthood of God." Carried away by his fervent eloquence, the house, many of whose members had been teachers or school officers, passed the appropriation, but it was lost in the senate for want of explanation, and the subject was referred back to the commissioners for further consideration. Barnard was more successful at the same session in advocacy of an act codifying and improving the school law of the State, which statute passed almost unanimously and was almost the only one of the session not a party one. It was framed by a committee equally divided politically.¹⁹ This law enabled school societies to establish schools of different grades, without reference to districts, and to distribute the school money among the districts according to the actual attendance of children at a school for period of six months in each year. It empowered school visitors to prescribe rules for the management, studies, books, and discipline of the school and to appoint a subcommittee to visit the schools, members of which subcommittee were to be paid by the society. School districts were allowed to unite for the purpose of maintaining a gradation of schools and to tax the property.

¹⁹ 1 Am. J. Ed., 676.

Chapter IV.

SECRETARY OF THE CONNECTICUT BOARD OF COMMISSIONERS OF COMMON SCHOOLS (1838-1842).

The greatest contribution¹ yet made by the United States to the uplifting genius of the world's progress was by the establishment of the free public school supported by general taxation and directed by the State, and Horace Mann and Henry Barnard were "the men to whom America owes the organization of the public-school system." This is a high claim to make, but there is much to support it. The educational career of these two men began in adjoining States almost at the same time. In 1837 Mann left the presidency of the Massachusetts senate to become secretary of the board of education just then established, and in 1838 Barnard was chosen as secretary of the Connecticut Board of Commissioners for Common Schools. The board was established largely through his efforts, and, as was natural, the governor appointed him as one of its members. When the board met for organization, Barnard nominated and secured the election as the secretary of Rev. Dr. T. H. Gallaudet, founder of the American Asylum for the Deaf. Barnard himself had intended to begin the practice of law and had been offered a partnership by Willis Hall, his former law instructor, who had become attorney general of New York;² Gallaudet, however, declined the position,³ on the ground that "more of the youthful strength and enthusiasm" were required therefor "than can be found in an invalid and a man of 50 years of age," as he then was. No other person had been considered as the secretary. Gallaudet suggested Barnard for the place and urged his selection upon the board.⁴ Barnard was just 27 years old and had all the "youthful strength and enthusiasm" that could have been desired, but he felt that he might be criticized for taking office under a statute which he had been influential in

¹ Kindergarten Magazine for 1897, article of James L. Hughes.

² Monroe, p. 13. Willis Hall (1801-1868) graduated from Yale in 1824, studied law in New York and Litchfield, was admitted to the bar in 1827, practiced in Mobile, Ala., from 1827 to 1831 and then in New York City. He was elected to the assembly in 1837 and 1842 and was attorney general of the State in 1838. He afterwards lectured in the law school at Saratoga.

³ Am. Ed. Blog., p. 106.

⁴ 1 Am. J. Ed., 669.

passing. However, he finally yielded his scruples and gave up his intention to practice law at the earnest solicitations of Gallaudet and of the other members of the board, and accepted the office for six months, until the plans of the board matured. (He agreed to serve without compensation, save the payment of his expenses.) At the end of the six months, and also at the end of the first and second years, he offered his resignation, but was induced to withdraw it. At the end of the third year he induced the board to elect Waldo⁵ as his successor, because his relations to both political parties would rescue the action of the board from any suspicion of its having a political character. Waldo declined, and urged Barnard to continue in office, saying: "If you fail, no man can succeed." After the fourth year, the board was legislated out of office, and Barnard wrote, with undue discouragement: "I failed." In reality, his term of office was far from a failure. Gallaudet had told him, when he took the place, that difficulties would—

probably not entirely defeat, but must inevitably postpone its success. But never mind, the cause is worth laboring and suffering for, and enter on your work with a manly trust that the people will yet see its transcendent importance to them and their children to the latest posterity and that God will bless an enterprise fraught with so much good to every plan of local benevolence.⁶

The Rev. Mr. Mayo gave a discriminating judgment upon Barnard's work, as follows:⁷ "Deficient in the great administrative power of Horace Mann, not always accurate in his knowledge of men and reading of public opinion, not indeed a politician, but a splendid scholar and an earnest advocate of the best theories of education before the country, his entire educational fabric was demolished on the advent of an opposition party to power in 1842;" but he had, by that time, "gathered together a common school public which ever after could be relied on to further any reform of which a commonwealth, so conservative and cautious, is capable."

The first meeting of the board was held on June 15 and 16, 1838, soon after its members were appointed. It is significant that there was no representative of Yale College on the board, and that Barnard's educational plans at this period of his life did not include any integration of the school with the college in one educational system nor any centralization similar to the powers of the university regents in New York State.⁸ In addition to Barnard, the members of the board were Gov. William W. Ellsworth, Seth P. Beers, the commis-

⁵ 54th Meeting Am. Inst. Instruction, 113. Loren Pinckney Waldo, of Tolland.

⁶ Am. Ed. Blog., p. 107.

⁷ Rep. of U. S. Commis. of Ed., 1896-97, 182.

⁸ Rep. of U. S. Commis. of Ed., 1896-97, I, p. 779.

sioner of the public school fund, the well-beloved President Wilbur Fiske, of Wesleyan University, John Hall, of Ellington, Andrew T. Judson, of Canterbury, Charles W. Rockwell, of Norwich, Rev. Leland Howard, of Meriden, Hawley Olmsted, of Wilton, and William P. Burrall, of Canaan.⁹ The duties of the secretary were: (1) To ascertain, by inspection and correspondence, the condition of the schools; (2) to prepare an abstract of information, with plans for the organization and administration of the school system, which plans might be considered by the board and by the legislature; (3) to attend and address meetings of parents, teachers, and school officers in each county, as well as local meetings; (4) to edit and superintend the publication of a journal devoted to common-school education; (5) to increase in any particular way the information and intelligence of the community as to the subject of education.¹⁰

In 1850 Barnard wrote that:

So far back as I have any recollection the cause of true education, of the complete education of every human being without regard to the accidents of birth or fortune, seemed most worthy of the concentration of all my powers and, if need be, of any sacrifice of time, money, and labor, which I might be called on to make in its behalf.¹¹

With such a spirit of consecration, Barnard accepted his office and, with such a steady consecration of all that he had and was, he continued throughout his long life. Horace Mann, his great contemporary educator, said that Barnard—¹²

entered upon his duties with unbounded zeal. He devoted to their discharge his time, talents, and means. The cold torpidity of the State soon felt the sensations of returning vitality. Its half suspended animation began to quicken with a warmer life. Much and most valuable information was diffused. Many parents began to appreciate more adequately what it was to be a parent; teachers were awakened; associations for mutual improvement were formed; system began to supersede confusion; some salutary laws were enacted; all things gave favorable augury of a prosperous career; and it may be further affirmed that the cause was so administered as to give occasion of offense to no one. The whole movement was kept aloof from political strife. All religious men had reason to rejoice that a higher tone of moral and religious feeling was making its way into schools, without giving occasion of jealousy to the one-sided views of any denomination. But all these auguries were delusive; in an evil hour the whole fabric was overthrown.

In this fashion, the great Massachusetts educator spoke of Barnard and of his work during the four years while he was secretary of the Connecticut School Board. In 1846 he called Barnard a "distinguished and able friend of the common school."

⁹ 1 Am. J. Ed., 669.

¹⁰ Monroe, p. 13.

¹¹ 1 Am. J. Ed., 669.

¹² In Boston, July 4, 1842, quoted from *Mass. Sch. Jour.*, by J. D. Philbrick in 1858, 4 N. E. Mag., 447. Monroe, p. 15.

Barnard cherished a laudable ambition:¹³

As a native-born citizen of Connecticut, as one whose roots are in her soil, I am ambitious of being remembered among those of her sons whose names the State will not willingly let die because of some service, however small, done to the cause of humanity in my day and generation, but I am more desirous to deserve at the end of life the nameless epitaph of one in whom mankind lost a friend and no man got rid of an enemy.

With such desires and purposes Barnard drafted an address to the people of Connecticut,¹⁴ which was signed by the members of the board, calling for the cordial support of the public. If this support should be given, the board looked "forward to the most cheering results." The board felt that its duties were of "no common magnitude," although it had been clothed with no official authority to make—

the least alteration in the system of common schools now in existence or to add to it in its various modes of action anything in the way of law or regulation of their own devising." Whenever it is found expedient to attempt this the people alone will do it through the constitutional organ of their power, the legislature, which they themselves create. The powers, if they may be so called, of the board of commissioners of common schools, are simply to ascertain for the information of the legislature, at its annual sessions, and of the citizens generally what has been done and is now doing in the common schools and in the whole department of popular education throughout the State and to suggest any improvement which from their own inquiries and reflections, aided by the experience of the community around them, may prove to be safe and practicable.

Other States were awakening to the importance of education.

Surely, then, Connecticut, whose very name calls up before the mind the whole subject of common-school instruction and popular intelligence, will at least be anxious to know where she stands in this onward march of intellect, whether she is fully keeping pace with it and whether she is sustaining the elevated rank in this respect which she has for a long time past felt herself authorized to claim and which has not been denied her.

The State "ought to know, and that speedily, the actual condition of her common schools. * * * But she can not know this without a faithful inquiry into the state of the schools," such as had not been made. No other organization than this board "can ever effect this important object."

After this skillful and tactful introduction, the address continues, stating that, if the "result of the inquiry should show that the system may be improved, these desirable changes may then be made. Facts are what we want, and the sooner we can procure them the sooner we shall be able to carry forward, with efficiency and increased success, our system of common school instruction, whether it remains in its present

¹³ 1 Am. J. Ed., 670.

¹⁴ Rep. of U. S. Commis. of Ed., 1896-97, I, 779.

* 1 Am. J. Ed., 670.

form or receives some partial modification. In carrying out its plans, the board will be obliged to rely very much upon its secretary, who is expected to visit all parts of the State. Circulars of inquiry as to facts were soon to be issued and county conventions were to be held, from which a "vigorous impulse to the cause of common school instruction" is expected. A semimonthly magazine would be published, as an organ of communication between the board and the people; to give information as to what is done, here and elsewhere, in regard to popular education; to assist in forming, encouraging, and bringing forward good teachers; publish the laws of Connecticut as to schools; to aid school committees; to give the means of ascertaining deficiencies and suggesting remedies; to "excite and keep alive the spirit of efficient and prudent action on the subject of popular education." The address concludes, in an elevated strain, thus:

The board, then, looking first to Almighty God and inviting their fellow citizens to do the same for his guidance and blessing in the further prosecution of their labors, feel assured that the public will afford them all needed encouragement and aid. Let parents and teachers, school committees and visitors, the clergy and individuals in official stations, the conductors of the public journals and the contributors to their columns, the friends of education generally, the children and youths, with their improving minds and morals, the females, with their gentle yet powerful influences, and all, with the good wishes and fervent supplications at the throne of grace, come up to the work. Then will we unitedly indulge the hope that wisdom from above will direct it, an enlightened zeal carry it forward, a fostering Providence insure it success, and patriotism and religion rejoice together in its consummation.¹⁶

Let us now briefly review the history of the schools in Connecticut down to 1838 and see what their condition was then found to be.¹⁷ The earnest Puritan leaders of the two colonies which formed Connecticut, through their desire that all should be able to read the Scriptures, were advocates of universal education from their first settlement. The Connecticut Code of 1650, following the example of that of Massachusetts Bay, contained a provision that the selectmen of every town must see to it that all men "endeavor to teach, by themselves or others, so much learning as may enable them perfectly to read the English tongue and knowledge of the capital laws" and that all "masters of families do, once a week at least, catechise their children and servants in the grounds and principles of religion." It was clear to them, that "one chief project of that old deluder, Satan, was to keep men from the knowledge of the Scriptures." They were not willing that learning should "be buried in the grave of our forefathers in church and commonwealth," and so they required every township of 50 householders to have a teacher of read-

¹⁶ The inquiries sent out by the board are printed in 1 Am. J. Ed., 686.

¹⁷ This review is based on Steiner's History of Education in Connecticut, U. S. Bu. of Ed., Circ. Inf., 1893, No. 21, pp. 17-43.

ing and writing, to be paid by the parents of the scholars, and every town of 100 families to "set up a grammar school, the masters thereof being able to instruct youths, so far as they may be fitted for the university." The New Haven jurisdiction was no less urgent in its code of 1656:

That all parents and masters do duly endeavor, either by their own ability and labor, or by improving such schoolmaster or other helps and means as the plantation doth afford, or the family may conveniently provide, that all their children and apprentices, as they grow capable, may, through God's blessing, attain at least so much as to be able to read the Scriptures and other good and profitable printed books in the English tongue.

In each town of the jurisdiction, it was ordered, in 1657, that a school be "set up and maintained," one-third of the teacher's salary being paid by the town and two-thirds by the tuition fees. The people had contributed "college corn" to Harvard. The desire of Rev. John Davenport's heart, manifested as early as 1647, to have a college in New Haven, was fulfilled when the Collegiate School of Connecticut, founded in Branford in 1701, and opened in Saybrook under the rectorship of the minister of Killingworth, was removed to Yale College in New Haven in 1716. Public schools for whites and for Indians were encouraged throughout the colonial period and some gifts were received for this purpose from individuals, like those of Gov. Edward Hopkins for grammar schools in Hartford and New Haven. Private schools were discouraged at first; but, toward the close of the colonial period, academies began to spring up here and there.

The control of schools lay in the town until 1794, when a school district, which was a subdivision of a town, was allowed to lay a tax for a schoolhouse and to collect it from the taxpayers of the district. The movement toward decentralization progressed rapidly. In 1795 the organization of school societies was allowed within towns, which societies were usually geographically coextensive with the ecclesiastical societies, into which the larger and more populous towns were becoming divided. This system differed from that of the other New England States and was completed by the act of 1798, which provided for a board of school overseers or visitors in each school society, who were given power to examine, approve, and dismiss school-teachers. From the same period also came another momentous change into the school system. Connecticut's charter placed her western boundary at the South Sea, or Pacific Ocean. The State had ceded all her vast western claims of land to the Federal Government in 1786, but had reserved a tract extending along the southern shore of Lake Erie for 120 miles from the western boundary of Pennsylvania. This tract she now voted to divide and to give 500,000 acres, the "fire lands," to sufferers from the depredations of

the British during the Revolution, while the proceeds of the sale of the remainder were "made into a perpetual fund, from which shall be * * * appropriated to the support of schools in the several societies constituted by law according to the lists of polls and ratable estates." This famous school fund, husbanded and invested by the able care of James Hillhouse, amounted to about \$2,000,000 in 1838. The State constitution of 1818 decreed that it should "remain a perpetual fund," and its income was rapidly approaching \$100,000 per annum. Mr. Hillhouse resigned the commissionership in 1825, and was succeeded by Mr. Seth P. Beers, who continued in the faithful discharge of the duties of his office until 1849.

The evils of the excessive decentralization of the schools, with the consequent lack of supervision, and of the absolute dependence upon the income of the school fund, without sufficiently supplementing it from the proceeds of taxation, soon became apparent. Apathy and carelessness increased and the Connecticut school system was ceasing to be what a Kentucky document had called it in 1822, "an example for other States and the admiration of the Union." It had been claimed that in Connecticut "elementary education is more generally diffused than in any other State of the Union," but this preeminence was now endangered.¹⁸ Mayo¹⁹ wrote that "the common school of Connecticut was left as a sort of educational house of refuge for the poorer class and, as a school for the poor in our country generally becomes a poor school, the educational decline went on apace."²⁰ The answers which the board of commissioners of common schools secured to their inquiries²¹ in 1838, showed clearly the need of a reform. Of 211 school societies, 104 reported and, from other sources, information was obtained,²² that there were 1,700 school districts, with an average number of 52 children in each. In 32 districts, there were less than 10 children. In 1,218 districts, there were 1,292 teachers, of whom 996 were men and only 296 were women. In many towns there was a winter school for a few weeks, taught by a man, and a summer school also for a few months, taught by a woman. Between these two terms a long intermission occurred. Not only was there no professional class of teachers, but so great was their peripatetic character that, of the whole number, only 341 had taught the same school before the current academic year, and only 100 had taught over 10 years, while many of these only taught in the winter schools. The average monthly salary for a man was \$15.48 and for a woman \$8.33, which latter compensation the board

¹⁸ Henry, C. H. *Common School System in Conn.*, 10 N. Y. Rev., 331, April, 1842.

¹⁹ Rep. of U. S. Commis. of Ed., 1896-97, vol. 1, p. 774.

²⁰ He especially disliked the school society, but I do not find that Barnard viewed it as a great evil.

²¹ 1 Am. J. Ed., 696.

²² See 1st Report of the Board in Conn. School Journal.

rightfully considered "inadequate and disproportionate." Teachers received their board, in addition to this; taking such accommodations as the parents of the pupils in turn could afford. This practice of "boarding around"—a sort of educational vagabondage—made the teacher's life much more uncomfortable and less attractive. There was no "seminary for teachers" and the best teachers soon obtained positions in private schools, where they would be better paid and more steadily employed.²³ Of 67,000 children of school age, 50,000 were enrolled in the public schools and the daily attendance averaged 42,000. In private schools, 12,000 children were enrolled and the remaining 5,000 were returned as not attending schools.

Only one report from a school society, written before 1838, could be found by Barnard. The length of the term varied with the compensation of the teacher, which was governed, not by his qualifications, but by the amount of public money in hand. The teachers were not always examined as to their qualifications, nor were the schools often visited. If there was any examination at all it was conducted by the school district trustees, and there was no system of certifying teachers; nor were there any provisions of law fixing the qualifications of teachers. Sometimes schools were forced to close in winter for lack of fuel. The schoolhouses were poor. There was little moral instruction, no fixed course of study, nor uniformity of textbooks. In the various schools 60 kinds of readers and 34 different arithmetics—in all, 200 elementary textbooks—were used. In 122 school societies the New Testament or the Bible was the chief or only reader used. Through the diversity of studies there was a lack of attention to young children, and an almost complete lack of gradation was often found. Parents failed to cooperate with teachers, who looked on their employment merely as a temporary resource. Only six school libraries could be found in the State. The children muddled through their school life, but in spite of all drawbacks often obtained a good education. Yet the tendency was—

to degrade the common school, as the broad platform where the children of the rich and the poor could stand in the career of knowledge and usefulness together, into a sort of charity school for the poor, to make it common in its lowest sense, not in its original, noble, republican meaning.

Conservatism also opposed improvement.²⁴

Among a class of the community, an impression prevailed that schoolhouses, studies, books, mode of management, and supervision which were good enough for them 50 years ago were good enough for their children now, although their churches, houses, furniture, barns, and implements of every kind exhibited the process of improvement.

The principle was avowed that the school fund was intended for the exclusive benefit of the poor, and that to support the common

²³ 1 Am. J. Ed., 674.

²⁴ 1 Am. J. Ed., 709.

school by a tax on the property of the whole community was "rank oppression on those who had no children" to educate or who chose to send them to private schools. By an increasing class of the community, "who despaired of effecting anything important in the common schools, private schools of every name and grade were exclusively patronized." "Opinions and practices like these would destroy the original and beneficent character of the common school and strike from it the very principle of progression."

The little interest taken in the common school was not only shown directly in the above ways, but was more exhibited, indirectly, in the subordinate places assigned it among other objects in the regards and efforts of the public generally, as well as of that large class of individuals who were foremost in promoting the various benevolent, patriotic, and religious enterprises of the day.

The discovery of this condition was no new thing. More important were the efforts of the commissioners to place the facts clearly before all the people and to enforce the lesson of these facts by the enthusiasm and energy of their secretary. In 1816, Denison Olmsted,²⁵ who later became professor of natural philosophy at Yale, upon taking his master of arts degree, delivered an oration at the Yale commencement on the "State of Education" in Connecticut, in which address he pointed out "the ignorance and incompetency of schoolmasters" as the primary cause of the low condition of the common schools, and appealed, both to public and private liberality, to establish institutions where a better class of teachers might be trained for the lower schools. He was then engaged in teaching in New London and had already projected an "Academy for School Masters."

The Rev. Samuel J. May²⁶ accepted a call to the Unitarian Church in Brooklyn, Conn., in 1822, and went there "with highly raised expectations of the character" of the State's schools. He found, however, that the school fund had "depressed, rather than elevated, the public sentiment of education." The low wages of teachers, the excessive multiplication of schools, the lack of adequate supervision impressed him unfavorably.

In May, 1823, James L. Kingsley, professor of ancient languages at Yale, writing in the *North American Review* upon the School Fund and the Common Schools of Connecticut²⁷ proposed the establishment of a superior school in each county, where teachers "may be themselves thoroughly instructed." In August of the same year, Mr. William Russell, principal of a school in New Haven, published a pamphlet entitled "Suggestions on Education," in which one of the suggestions was a seminary for the teachers of the district schools.

²⁵ Am. Ed. Blog., p. 121.

²⁶ Am. Ed. Blog., 39.

²⁷ 10 Am. J. Ed., 15.

Rev. Dr. Gallaudet, in the year 1825, over the signature "A Father," wrote a series of essays for the Connecticut Observer, at Hartford, on a "Plan of a Seminary for the Education of Instructors of Youth." This advocacy of special institutions for the professional training of young men and women for the office of teaching²⁸ was widely influential. The articles were collected and published in a pamphlet of 40 pages and were discussed in educational conventions held in Hartford in 1828 and 1830.²⁹ Of the author Rev. Mr. May³⁰ wrote that he was especially important as an educator, since he "not only gave every day, in his instruction of his pupils, remarkable illustrations of the true principles and some of the best methods of teaching, but he interested himself, directly and heartily, in the improvement of all schools." In May, 1826, the legislature had printed a report made by Hawley Olmsted, principal of a private school in Wilton, conceding that the condition of the schools was low and that much ought to be done to improve them. In 1828 Olmsted prepared a second and similar report.

Rev. Mr. May was impelled, by his conviction of the "defects in our common schools," to issue a call for a convention in 1826 to consider these defects, their causes, and "the expedients by which they may be corrected." Twenty towns sent 100 delegates, and valuable letters were received. Among May's coadjutors were W. A. Alcott, of Wolcott, and Bronson Alcott. In the next year, at Hartford, the Connecticut Society for the Improvement of Common Schools was formed. R. M. Sherman accepted its presidency and Rev. Horace Hooker, T. H. Gallaudet, and Thomas Robbins were "real laborers" therein.³¹ About 30 years afterwards May wrote:

Since that day the interest of the people and their rulers has not been suffered to die; until, at length, under the lead and by the unremitting exertions of Henry Barnard, LL. D., one of the wisest and ablest of master builders, the system of common schools in Connecticut has come to be so improved that it need not shrink from a comparison with any other in our country.³²

Without such a band of men interested in the cause of education as we have found in Connecticut, even Barnard's "unremitting exertions" would have failed. He well appreciated the need of arousing the people and, in his second annual report,³³ he called attention to the need of publicity. All agencies for influencing the public

²⁸ Am. Ed. Blog., 106.

²⁹ They were republished in the *Annals of Education* for 1831 and in the *Connecticut Common School Journal* for 1838. 10 Am. J. Ed., 15.

³⁰ Am. J. Ed. Blog., 39.

³¹ Am. Ed. Blog., 89, 106.

³² In 1830 a teachers' convention was held at Hartford under the presidency of Noah Webster. Gallaudet was one of the committee of arrangements and among the speakers were Dr. Humphry, William A. Alcott, and Rev. Gustavus Davis. Am. Ed. Blog., 106.

³³ Conn. Com. Sch. J., 199.

mind must be called upon. The press had been almost silent, and the church had almost forgotten the school, its "earliest offspring." One of Barnard's early acts was to secure the assistance of Dr. Gallaudet, by aiding in securing a fund to pay him a salary for five years of \$750 per annum. The Connecticut Retreat for the Insane offered Dr. Gallaudet \$500 for serving as its chaplain and Barnard raised the remaining amount, that he might be aided by Gallaudet, in the latter's spare time. As a result, the two men visited every one of the eight counties in 1838³⁴ and addressed conventions of teachers, school officers, and parents. In 1839 and 1840, Gallaudet took part in teaching the normal classes for teachers held in Hartford.³⁵ At the end of the first year of the board's existence, in May, 1839, Barnard made his report concerning 1,200 schools. He had addressed over 60 public meetings, inspected over 200 schools while they were in session, and had spoken or written to officers or teachers in over two-thirds of the school societies. He had also edited the monthly Connecticut Common School Journal, of which an edition of 6,000 copies had been circulated, for the most part gratuitously, throughout the State. For these services he had received³⁶ a per diem of \$3, and his expenses. Of this report, Chancellor Kent³⁷ said that it was—

a laborious and thorough examination of the condition of the common schools in every part of the State. It is a bold and startling document, founded on the most painstaking and critical inquiry, and contains a minute, accurate, comprehensive, and instructive exhibition of the practical condition and operation of the common school system of education.³⁸

Gov. Ellsworth, in his message to the legislature, thus asked:

Who that wishes the rising generation to be blessed with knowledge, and especially those indigent children who have no other advantages beside the common school, will look on this generous and Christian effort with jealous feelings?³⁹ We have, in Connecticut, long enjoyed a system of general education, the work of experience and time, which should not be altered in a spirit of experiment or rashness. Nor do I apprehend anything of the kind from those who are most zealous in the cause of education. It is certain that our schools can be essentially improved and that something should be attempted worthy of the subject.

What Barnard attempted at this session has been told in the previous chapter.

The first number of the Connecticut Common School Journal was published in August, 1838, at a subscription price of 50 cents a year.

³⁴ Am. Ed. Blog., 107.

³⁵ He later appeared before the committee on appropriations in behalf of a normal school, lectured at a teachers' convention in Hartford in 1840, etc.

³⁶ 1 Am. J. Ed., 673.

³⁷ Commentaries, Vol. II, p. 106.

³⁸ Kent refers to Barnard's works in general "with the highest opinion of their merits and value."

³⁹ 1 Am. J. Ed., 670.

In the opening address the board solicited the cooperation of the public "to promote the elevated character, the increasing prosperity, and the extensive usefulness of the common schools of Connecticut." The magazine must have been most stimulating and informing to its readers. Its scope is fully as wide as the more famous American *Journal of Education*, which Barnard afterwards edited, and it is much more interesting and better journalism. In the early numbers we find articles upon Diversity of textbooks, female teachers, the Bible in schools, newspapers, schoolhouses, infant schools, Sabbath schools, school furniture, professional education, school conventions, school visitors, drawing, gravitation, reviews of educational literature, music, lyceums, schools in South America, in Holland, and in Prussia, in Michigan, in Cincinnati, and in New York, school libraries and town associations for the improvement of schools. Later follow articles on English school government, schools in Albany and London, the Waldenses, hygiene, management of schools, local history, the use of slates, school management. Gallaudet's articles, Bushnell's sermon on "Christianity and the Common School," Calvin E. Stowe upon normal schools, diversify the contents. "What can be done to improve common schools this winter?" and "School books recommended in Windham County" are found by the side of articles on Pestalozzi, Chinese education, spelling, geography, and bookkeeping. Thus did the journal carry out its aim to "diffuse light." In his presidential address before the meeting of the American Institute of Instruction, held at Portland, Me., in August, 1864, Mr. Charles Northend, of New Britain, spoke of this periodical and of its editor in these words:

It hardly need be said that the journal was published by Mr. Barnard at a constant pecuniary sacrifice—a sacrifice no man would make whose soul was not wholly alive to the magnitude and importance of the work in which he was engaged. Teachers of New England can not too gratefully remember the name of Henry Barnard for his earnest efforts to arouse the public mind to the importance of public education and for his long-continued labors as a pioneer in the work to which he so assiduously devoted himself; often, too, under the most disheartening circumstances. Let his name and memory be cherished by teachers and handed down to posterity, as one whose best energies and talents were given to the cause of education with a zeal which no coldness, apathy, or even opposition could quench. Let us not, my friends, who are, in some measure, reaping the fruits of his labors, cease to be grateful to him for breaking up the fallow ground and casting in the seed, but may we strive so to till the soil prepared for us that year by year it may become more productive.

At a State educational convention, held at Hartford on August 28 and 29, 1839,* Barnard was most active, speaking on the importance of gradation of schools, on school architecture, on vocal music and drawing in schools, and on institutions and agencies for the proper

* 28 Am. J. Ed., 233.

training of teachers. During the following autumn,⁴¹ at his own expense, Barnard called together the first teachers' institutue in America to—

show the practicability of making some provision for the better qualifications of common-school teachers, by giving them an opportunity to revise and extend their knowledge of the studies usually pursued in district schools and of the best methods of school arrangements, instructions, and government, under the recitations and lectures of experienced and well-known teachers and educators.

Thus what the legislature had refused to appropriate money for was carried out by the initiative of this enthusiastic young man of 28 years.⁴² A group of about 25 teachers from Hartford County was gathered and placed under the general charge of T. L. Wright, principal of the grammar school, who taught grammar and school keeping. Mr. John D. Post, a teacher in the grammar school, reviewed arithmetic, and Mr. Charles Davies explained higher mathematics, as far as they were ever taught in the district schools, or would assist in the understanding of elementary arithmetic. Rev. Mr. Burton, formerly one of the faculty of the teachers' seminary in Andover, Mass., gave lessons in reading; Rev. Dr. Gallaudet explained how composition could be taught even to young children, and gave lectures on school government and the instruction of very young children on the slate. Mr. John P. Brace, principal of the Hartford Female Seminary, explained the first principles of mathematics and astronomy, the use of the globes, etc. Mr. Snow, the principal of the Center District School, gave several practical lessons in methods of teaching with classes in his own school; while Barnard himself delivered several lectures explanatory of the relations of the teacher to the school, to parents, and their pupils, on the laws of health to be observed by pupils and teachers in the schoolroom, and on the best modes of conducting a teachers' association and of interesting parents. A portion of each day was devoted to oral discussions and written essays on subjects connected with teaching and to visiting the best schools of Hartford. Before separating, the teachers published a card of thanks. Barnard wrote, in the *Common School Journal* for November, 1839, that \$1,000 (one-fifth of the appropriation asked) would have accomplished more "for the usefulness of the coming winter schools and the ultimate prosperity of the school system, than the expenditure of half the avails of the school fund in the present way," for it could have given 1,000 of the 1,800 teachers in the State "an opportunity of critically reviewing the studies which they will be called upon to teach, with a full explanation of all the principles involved." In his fervent way, he added: "No one sends a shoe to be mended, or a horse to be shod,

⁴¹ 1 Am. J. Ed., 662; 15 Am. J. Ed., 387.

⁴² 15 Am. J. Ed., 388.

or a plow to be repaired, except to an experienced workman, and yet parents will employ teachers who are to educate their children for two worlds," without caring for training of such teachers.

In the spring of 1840,⁴³ Barnard, at his own expense, assembled a similar class of female teachers in Hartford under Mr. John P. Brace, with the same satisfactory result; but in vain did he renew his recommendation to the general assembly for an appropriation. He was not discouraged. During the next three years, in addresses before conventions and in interviews over 15 States, he presented this mode of dealing with the problem of young people who rush into this "sacred work without that special preparation which its delicacy, difficulties, and far-reaching issues demand." Without ceasing to urge the establishment of normal schools, he also pointed out the—

immediate, inexpensive, and practical results of gathering the young and less experienced teachers of a county (as the most convenient territorial division of a State) for a brief, but systematic review of the whole subject and, especially, for the consideration of difficulties already met with in studies and school organization and management, under eminent instructors.

In 1840 and 1841, obedient "to the call of his fellow citizens, especially of Dr. Horace Bushnell, Barnard served as a member of the Hartford school committee and prepared a plan for the union of three city school districts, which unfortunately failed of adoption at that time. In the latter year, however, he was more fortunate in that he secured the unanimous passage by the legislature of a revised school law, which he had drafted at the request of the board and which had been discussed for several weeks by the joint committee on education, without any material change from the original draft. By this law the powers of the school districts were enlarged so that they might elect their own school committees, establish schools, employ teachers, and provide suitable rooms, furniture, apparatus, and library for the schools. To check too great a subdivision of districts, no new one could be established, except by the general assembly, so as to reduce below 40 the number of children between the ages of 4 and 16 in any district. Barnard considered that two schools in one district were better than two districts and wished to prevent the quality and quantity of instruction given in the schools from being sacrificed to the eagerness to bring schools nearer to every family. A provision was included for the establishments of union districts, containing joint schools for older children, leaving younger children by themselves and thus improving the gradation and cutting down by one-half the variety of ages, classes, and studies in each school.

⁴³ 15 Am. J. Ed., 390.

⁴⁴ 28 Am. J. Ed., 233.

This law tended to give permanent employment in the primary schools to female teachers and to eliminate all but the best male teachers.

The law also made possible the establishment of schools of a higher grade by school societies, returning to the idea of the law of 1650, which provided for county grammar schools. Barnard felt it was very important to have high schools as public schools for all and not as private schools for the rich.

The employment of competent teachers for at least half the year was made more certain by providing for examinations for teachers and directing that no public money be given to any district in which a certified teacher had not taught for four months during the year. Each teacher was directed to keep a school register.

The powers and duties of school visitors were modified and more clearly defined: They might prescribe rules and regulations concerning the studies, textbooks, classification, and discipline of scholars, and withhold teachers' certificates from unqualified persons. They must visit each school at least twice during each term, for "no adequate substitute can be provided for frequent, faithful, and intelligent visitation of schools." They may appoint a committee to act for them, shall receive \$1 per day for their services, as in New York and Massachusetts, and must prepare an annual written report.

School societies were directed to distribute public money so as to give each small district at least \$50 a year and to encourage attendance of pupils by making the amount given each district depend on the aggregate attendance for the year.

A most important provision forbade the exclusion of any child from school through the inability of parents to pay the school tax, since the burden of the education of the indigent ought to be placed on the community.

Through this law it was felt that the progress of the schools was assured by the labor of the school visitors by collecting their reports for the information of the general assembly and by "disseminating back the information thence obtained" through the reports of the board of commissioners; so that a valuable suggestion from one society should become the property of the State.

Barnard was not alone in planning for improvements in the schools. In 1840, Prof. Denison Olmsted, who had become a member of the board of commissioners, drafted its annual report, in which he advocated "the employment of female teachers to a much greater extent than has hitherto been done." He also "frequently addressed teachers' institutes and lectured in the house of representatives in behalf of pending legislation concerning schools. The famous

⁴⁴ Am. Ed. Blog., 123.

teacher, Mrs. Emma Willard,⁴⁶ had returned to live in Connecticut, and, residing in Kensington, was elected superintendent of schools in that town in 1840, as she was anxious to check the decadence of common schools. When Barnard came thither to hold a public meeting the schools marched with banners and crowded the meeting house with the largest congregation that had been seen there since the ordination of a minister 22 years before. An address written for the occasion by Mrs. Willard was read by Mr. Elihu Burritt, "the learned blacksmith," and refreshments were passed in the church. Many came from neighboring towns and a band from Worthington volunteered its services. Mrs. Willard projected a plan for a normal school in Berlin, which was rather intended to be a well-organized system of teachers' institutes than a permanent school. Meetings like that at Kensington were held all over the State, and in Barnard's report for 1841 he wrote that he had addressed 125 public meetings in his three years of office, in addition to visiting over 400 schools in session, holding interviews with persons in every school society and receiving communications from all but 50 societies. He had paid back all his salary and had expended \$3,049 more from his own means. Other gentlemen had contributed \$785 and the subscriptions to the Common School Journal had amounted to \$1,293.⁴⁷ In his fourth report, made a year later, he stated⁴⁸ that, during his term of office, he had addressed 142 public meetings and secured 300 addresses on 58 different educational topics from other men. He had also spoken to children in the schools and to voluntary associations of parents and others interested in the improvement of schools in their towns, societies, or districts, as well as to assemblies of teachers in various societies and towns. To arouse interest, he had also often held meetings of all the schools in a town or school society with the teachers and parents and had urged the establishment of lyceums and lectures and libraries,⁴⁹ which—

aim to supply the defects of early education and to carry forward that education far beyond the point where the common school, of necessity, leaves it. They have been found and can be made still more useful, in bringing the discoveries of science and all useful knowledge to the fireside and workshop of the laborer, in harmonizing the differences and equalizing the destructions of society, in strengthening the virtuous habits of the young and alluring them from vicious tastes and pursuits, in introducing new topics and improving the whole tone of conversation among all classes. In this way, they create a more intelligent public opinion which will inevitably, sooner or later, lead to great improvement in the common school, as well as in all other educational institutions and influences.

Barnard early recognized the danger of child labor, and in 1842 published a pamphlet of 84 pages upon the Education and Employ-

⁴⁶ Am. Ed. Blog., 160. Sketch by Henry Fowler.
⁴⁷ Vide N. Y. Rev., Vol. X, p. 331, April, 1842.

⁴⁸ 1 Am. J. Ed., 707.
⁴⁹ 1 Am. J. Ed., 711.

ment of Children in Factories, which pamphlet contained an appendix dealing with the "influence of education in the quality and pecuniary value of labor and its connection with insanity and crime."

Returning to these themes in his report for 1842, he advocated the passage of a law prohibiting the employment of a child under 14 years of age in a factory for more than eight hours during the daytime, or at all either in the night or without a certificate of attendance on a day school for 3 months of the 12.

He again advocated lecture courses during the winter in connection with the schools and the establishment of libraries everywhere, for which new books should be purchased, "especially of that class which relate to the history, biography, scientific principles, or improvement of the prevalent occupation of the inhabitants."⁵⁰ This report, in which he placed the duty of educating and supporting children first on the parents, then on the neighborhood, and finally upon the State, was his last. It was made in the beginning of May; and in an Independence Day oration delivered in Boston, Horace Mann was obliged to say:

Four years ago a new system was established in Connecticut which was most efficiently and beneficently administered under the auspices of one of the ablest and best of men; but it is with unspeakable regret that I am compelled to add that within the last month all his measures for improvement have been suffered to fall.⁵¹

Barnard's activity had been of great benefit to Massachusetts. Not confining his efforts to Connecticut,⁵² he had made such a convincing speech of two hours upon graded schools at Barre, Mass., that Mann had said to him: "If you will deliver that in 10 places, I'll give you \$1,000." Mann had consulted with Gallaudet and Barnard in Hartford with regard to the original plan of the Massachusetts Normal School, which was opened at Lexington in 1839, and Barnard had delivered addresses in favor of it. When Everett was governor he asked Mann to write Barnard requesting him to come to Boston and save the State from the disgrace of closing the normal school and doing away with the State board of education, as had been threatened. Barnard responded to the call of Mann, and their joint efforts secured a change in the votes of several members of the legislature and thus prevented the threatened blow at the educational system of Massachusetts.

As the cause of Barnard's dismissal from office, I can not but think that his activity as a Whig, some 10 years previously, had done much to prejudice the Democrats against him. That party had secured the governorship and a majority of the legislature in 1842, overthrowing the Whigs, who had previously been in power. In his message to the general assembly, Gov. Chauncey F. Cleveland said that the board

⁵⁰ 1 Am. J. Ed., 703. ⁵¹ 1 Am. J. Ed., 719. ⁵² N. E. Mag., N. S., Vol. XIV, 567.

of commissioners of common schools had been established as an experiment, since the beneficial influence of the school fund had been questioned. Another experiment had been the paying \$1 per day to school visitors. The governor recommended the abolition of the experiments, since free service is better, and continued :

Without questioning the motives of those by whom these experiments were suggested and adopted.⁴⁴ I think it obvious that public expectations in regard to the consequences have not been realized and that to continue them will be only to entail on the State a useless expense.

In later years, Barnard charged that Cleveland's chief assistant⁴⁵ was the "same archdemagogue, John M. Niles, who objected in 1838 to paying visitors and attacked every year any State supervision of schools, opposed the union to the city school districts in Hartford, and circulated a petition to the legislature for the repeal of all laws for teaching" any but elementary branches of knowledge. Fearing a successful attack on the Connecticut board, Horace Mann wrote Barnard, on April 25, 1842, that George S. Hillard had written an article in the defense of it for the *North American Review* and that Mann himself had written to Democrats on the matter and had visited them in Massachusetts, Albany, etc. The governor is said,⁴⁶ personally, to have spoken to the members on the committee on education in behalf of the position taken in his message, and, finally, the legislature passed an act by which "all direct supervision of the school interest on the part of the State" was destroyed, as well as "any agency to awaken, enlighten, and elevate public sentiment in relation to the whole subject of popular education." The provisions relating to union schools also were stricken from the statutes. The committee on education, in their report favoring these reactionary measures, acknowledged that Barnard had "prosecuted, with zeal and energy, the duties assigned him * * * and collected and diffused a fund of information throughout the school societies and districts." The alleged "want of success" was not attributed to "want of faithfulness and attention on his part," but the hopes entertained that more lively interest would be taken upon the subject of common school education had not been realized and the expense attending Barnard's duties was a "source of serious complaint."

In reply to this, Barnard pointed out that his expenses, paid from the civil list fund and not from the school fund, had been \$1,571 for the first year and \$1,589 on the average for each of the first three years. The members of the board paid their own expenses. Barnard had been allowed \$1,000 a year as salary and gave his whole time to the work. He had paid \$3,049 from his own resources dur-

⁴⁴ 1 Am. J. Ed., 677.

⁴⁵ 22 Am. J. Ed., 386.

⁴⁶ 1 Am. J. Ed., 677.

ing his term of office. For example, in 1839, he employed four teachers to visit as many counties and report upon the schools there. He had paid for the drawings, etc., of 50 new schoolhouses constructed since 1838. He had borne the expense of the teachers institutes in 1839-40 and had paid also for placing pedagogical books in the stores and for contributions to the Common School Journal. He had distributed the educational laws of Connecticut at his own expense. When his accounts had been audited by the committee on education in 1841, the report had stated that "the action of the board of commissioners had been well advised and useful and the labors and sacrifices of the secretary deserving of general approbation."⁵⁶

In relinquishing his office, Barnard wrote in the Journal: "We look for our reward in the contemplation of the ever-extending results of educational efforts and in the consciousness that we have labored with fidelity on our small allotment in this great field of usefulness." The board's testimony to his "indefatigable exertions" was that his—

labors will long be felt in our schools and be highly appreciated by all who entertain just and liberal views on education and, whether appreciated or not, he will assuredly have the satisfaction of having generously, with little or no pecuniary compensation, contributed four of the prime years of his life to the advancement of a cause well worthy of the persevering efforts of the greatest and best of men.

We have mentioned many of his attempts at improvement in schools, but a few more still claim our attention. Impressed with the need of better schoolhouses, he published the first edition of his important work on School Architecture in 1839. In the years 1840-1842, largely as a result of the stimulating advice he gave, 3,000 volumes were added to school libraries, and 100 pieces of apparatus bought for schools. Treatises were also prepared on Slate and Black-board Exercises,⁵⁷ and on Systems of Public Schools for Cities and Populous Villages. James S. Wadsworth, of Genesee, N. Y., visited his brother, Daniel, in Hartford in June, 1842, and, finding that the legislature would not pay for printing this report, paid for an edition of 30,000 copies, which were gratuitously distributed.⁵⁸ Among the reforms which Barnard advocated, but which had not been achieved, were the abandonment of the quarter bills and the taxation of property, whether or not its owner had children. He felt that, when school expenses were met by bills paid quarterly by parents,⁵⁹

⁵⁶ Among minor activities (1 Am. J. Ed., 697, 699) Barnard had inquired into the early intellectual and moral education of criminals and paupers to "ascertain the universality and practical nature of education given in the schools," and was negotiating with Mrs. Willard in the hope to secure her services gratuitously as principal of a seminary for the training of female teachers in connection with the education and care of orphan children.

⁵⁷ 1 Am. J. Ed., 700.

⁵⁸ 28 Am. J. Ed., 231.

⁵⁹ 1 Am. J. Ed., 701.

parents were tempted to keep children at home for "trifling occasions" and that those who patronized private schools should not be exempted from all expense on behalf of the education of the poor. Another reform which he desired was the union, or at least the concert of action of several districts of a city, so as to have one system of studies, books, and management, a graded system being established, composed of primary schools with female teachers, secondary schools with male teachers, and high schools with separate departments for boys and girls, which schools should give courses of instruction preparatory to the pursuits of commerce, manufactures, and mechanic arts.⁶⁰

In general, we may sum up the achievements of his four years as follows: (1) He had agitated throughout the State the importance of improvement of schools; (2) had revised the school law; (3) had done much to better the school architecture; (4) had emphasized the importance of having professional teachers; (5) had shown the value of school supervision; and (6) had almost created educational literature in America.

These are no small achievements, and there is no wonder that his friends proposed to form a private organization and keep Barnard in his work as its secretary. When John T. Norton proposed this to the wise R. M. Sherman, the latter successfully opposed it, saying that the supervision of the schools was a State affair and ought to be under the legislature.

Four years later, when time had enabled men to view the destruction of the board of commissioners of common schools with some perspective, Horace Mann wrote of this blow to education thus, in the *Massachusetts Common School Journal*,⁶¹ "One only of the New England States proves recreant to duty in this glorious cause, the State of Connecticut." He proceeded to write, with high praise of Barnard, that "it is not extravagant to say that, if a better man be required, we must wait at least until the next generation, for a better one is not to be found in the present."

In Hartford the powerful voice of Horace Bushnell was raised in words of deep regret on account of Barnard's dismissal, in a lecture before the Young Men's Institute upon the Education of the Working Classes. One of the newspapers commented upon this speech and Bushnell replied, stating that, by Barnard's removal, a—

great injustice was done to him, and a greater injury to the State. Mr. Barnard, at my instance in part, had withheld himself from a lucrative profes-

⁶⁰ It is interesting to observe that, in 1856, Barnard had retroceded somewhat from his position and then held that a "small tuition, fixed and payable in advance, so low as to be within the reach of the poor, will serve to remind parents of their responsibility and, in the aggregate, will be a large addition to the pecuniary means of a district."

⁶¹ 1 Am. J. Ed., 719.

sion and renounced the hope of a politician. No public officer that I have ever known in the State has done so much of labor and drudgery to prepare his field, expending at the same time more than he received and seeking his reward in the beneficent results by which he was ever expecting to honor himself with the State.

His opponents, in dismissing him, "certainly could not have given him credit for that beneficent, that enthusiastic devotion, I may say, to his great object, which it is the unfailing token of an ingenious spirit to conceive and by which I am sure he was actuated."²

² 1 Am. J. Ed., 720.

Chapter V.

STATE SUPERINTENDENT OF SCHOOLS IN RHODE ISLAND (1843-1849).

After Barnard's retirement from office, he remained at home for a few months, except for a summer tour to the fountain heads of the Connecticut River. In October, supplied with letters of introduction from such friends as Dr. E. Jarvis, he started on an extended tour of the Western and Southern States, expecting thus to collect material upon educational history. Mann had urged him to accept the principalship of the normal school at Lexington, and Dr. Gallaudet was urgent that Barnard allow his friends to take up a subscription for his salary, so that his work might be continued in Connecticut, but he cared to accept neither proposal.¹ Leaving Hartford about the 20th of October, on the 28th he was in Buffalo, on November 10 in Cleveland, whence he traveled to Detroit. On December 14 he was in Columbus, Ohio, and journeyed thence to Cincinnati, Lexington, Frankfort, Louisville, Nashville, and Vicksburg, where he arrived February 23. From Hartford, on February 14, his friend, George Sumner, wrote him that a rumor had come that Barnard had become a Roman Catholic and urged him to hasten home, "for there is another civic battle to be fought and, for aught I know, a victory to be won, and you should be here to enjoy the spoils." On the next day he was in Jackson, and, on the 26th, in Natchez. New Orleans saw him on April 1, Athens, Ga., on the 22d; and, passing through Augusta, Columbia, and Charleston, Barnard arrived at Petersburg on May 6, at Richmond on the 9th, and at Baltimore on the 15th. Philadelphia and New York were visited and he was in Hartford about the first of June.

Of this journey Mayo wrote: "He was everywhere found carefully observing and wisely suggesting, and everywhere welcomed by the influential friends of education."² The summer passed and, in September, Hon. Wilkins Updike, of Kingston, R. I., invited Barnard to visit him³ and assist in devising a plan for a more efficient organi-

¹ Hughes, *N. E. Mag.*, p. 567.

² Rep. of Commis. of Ed., 1896-97, I, 786.

³ For incidental notices of Barnard's Rhode Island career, in addition to those elsewhere cited, reference may be made to W. H. Tolman's *History of Education in R. I.*, p. 30; *U. S. Bu. of Ed., Circ. of Inf.*, 1894, No. 1; Thomas B. Stockwell's *History of Public Education in Rhode Island*, 1876, and the *Documentary History of Public Schools in Providence*, p. 96.

zation of the public schools of Rhode Island.⁴ Mr. Updike was a member of an old Rhode Island family and knew the needs of his State. With Barnard he drew up a brief act providing for the appointment of an agent, or commissioner, to—

collect and dispense, as widely as possible, among the people, knowledge of the most successful methods of arranging the studies and conducting the education of the young, to the end that the children of the State, who should depend on common schools, may have the best education that these schools may be made to impart.

Barnard was—

averse to any law which could not be sustained by public opinion and all his plans of operation were based on the cardinal idea of quickening, enlightening, and directing aright the popular intelligence and feeling, by judicious legal enactments—as public sentiment and voluntary effort will not long remain in advance of the law.⁵

Mr. Updike was a member of the State legislature and introduced this bill. He also secured an evening session of the assembly to hear an address by Barnard on "The conditions of a successful system of public schools." The bill was unanimously passed by both houses and soon afterwards Barnard was invited to "test the practicability of his own plans of educational reform." He declined, on the ground of his projected literary work, but Gov. James Fenner answered him "It is better to make history than to write it," whereupon Barnard accepted the position offered him. As a result, he organized a system of agencies in the next four years which wrought a "revolution in the public opinion and the educational system of the State; a revolution which is without a parallel, so far as we know, in the history of popular education for thoroughness, completeness, and permanence." The plan was in general that which had been employed in Connecticut, but scarcely any opposition was aroused in Rhode Island, and, during the whole time of his holding the position, Barnard could not remember a single article in any newspaper "calculated to impede the progress of school improvement." Barnard's plan was first to ascertain the local conditions and then to arouse the people to reform them. He endeavored to show men that they had been ignorant, to convince them of the advantages of education, and to induce them to "contribute money for an object of which they do not confess the value."⁶ His personal popularity helped his cause. President Kingsbury, of the Rhode Island Institute of Instruction, said that Barnard was "peculiarly happy in securing the cordial cooperation of persons of every class who take an interest in education,"⁷ and that he was "gentlemanly in his address, conciliatory in his measures, remarkably active and earnest," one who "combines more essential elements of character for a super-

⁴ 1 Am. J. E., 725. ⁵ 1 Am. J. Ed., 720. ⁶ 1 Am. J. Ed., 727. ⁷ Am. J. Ed., 725.

intendent of education than any other individual with whom it has been my fortune to be acquainted."⁸

The problem was historically very different from that encountered in Connecticut. Rhode Island had been settled by people who denied that religion was a concern of the State, and in those days education was so closely connected with religion that they interpreted the phrase "only in civil things" to exclude the support of schools from the field of governmental activity. To compel a citizen to support schools, or to educate his children, was regarded as akin to a violation of the right of freedom of conscience. Again, the leading denomination in Massachusetts and Connecticut, the Congregational,⁹ believed in a learned ministry, while in Rhode Island the Quakers and Baptists, which were prominent denominations, did not emphasize this idea. Hostility to other States also hindered the establishment of schools in Rhode Island. Until 1828, while there were private schools in many places, there were no public schools outside of Providence, and, about 1835, a thrifty old farmer is reported to have said that he would not contribute to a district school, for "it is a Connecticut custom and I don't like it."⁹ So strong was this hostility that in 1846, after Barnard had explained the proposed new school law to the legislature, the member from C—— is said to have referred to the provision that the towns must raise a sum by taxation to support schools and to have said that "this could not be enforced in C—— at the point of the bayonet." Some one even said to Barnard: "Why waste your talents; you might as well beat a bag of wool. Our habits are fixed. You can not change them. One might as well take a man's ox to plow his neighbor's field as take his money to educate his neighbor's son."¹⁰ There was the same evil of excessive subdivision of towns into small school districts as in Connecticut,¹¹ the same variety of textbooks. Schools outside of Providence were open for barely three months in each year. Of the 21,000 children enrolled in the public schools,¹² the regular attendance amounted to only 13,500. The idea that the State was responsible for the education of children was foreign to Rhode Island soil.¹³ The task, therefore, which lay before the new agent was no mean one, for he had to "revolutionize the public sentiment of the State."

Barnard was then 32 years old and was exceptionally well fitted for the enterprise. He was in—

the full vigor of an aggressive manhood, possessed of a thorough collegiate education, good native powers as a speaker, a thorough training in the law,

⁸ Barnard had been elected a corresponding member of the Rhode Island Historical Society in 1838, which seems to have been his first connection with the State.

⁹ 1 Am. J. Ed., 723.

¹⁰ Hughes, p. 569.

¹¹ Rep. of U. S. Commis. of Ed., 1896-97, I. 786.

¹² 3,000 were in private schools.

¹³ Hughes, p. 568; Stockwell, T. B., Commis. of Ed. R. I., report for 1894.

and the knowledge and experience gained from the discharge of somewhat similar duties in his native State, as well as from travel and study abroad.

First "he worked to learn the actual condition of educational affairs in his own characteristic, persistent, and minute style," to quote Mayo. During a year and a half this apostle of the new educational gospel went up and down this State into every remote corner, over every hill, through every valley, until it is not too much to say that no man could have been ignorant of what was going on, and teachers and scholars were inspired to a more earnest effort. School officers were roused to greater activity; the people in public assemblies and at their own firesides were taught the new and better way. The concrete result of the labors of these 18 months was the act passed finally June 27, 1845, and which has "continued in substance to the present." Barnard's appointment was announced by Gov. Fenner¹⁴ on Dec. 6, 1843. The State was so small that if it moved at all it was bound to move all together, but the time was a difficult one, for the aftermath of the Dorr Rebellion of the previous year was still evident. Elisha R. Potter¹⁵ wrote, over 20 years later, that though Barnard was in the State during "a time of intense political excitement, all harmonized when working under his enthusiastic and unselfish leadership." Six months after he took office, on June 23, 1844, Horace Mann wrote Barnard from Wrentham, Mass., concerning the Rhode Island school law, which Barnard was already framing:

I think the plan an admirable one. Its principal features are also excellent. Its minor details must, of course, be so framed as to correspond with the habits of the people and the requirements of the laws on kindred subjects. Of these, a stranger can not judge. I see nothing exceptionable in them.

Mann felt that care must be taken that no religious narrowness enter in, and in conclusion, he wrote: "If Rhode Island passes that bill, she will have one of the best systems of public instruction in the world, and in one generation it will regenerate the mass of her people." The bill, retaining the useful features of the old law, was introduced into the general assembly in session May, 1844, and, when reported to the house¹⁶ from the committee in June, was printed and discussed. The provisions were explained by Barnard before a convention of the two houses, questions were answered, and after debate the bill received the almost unanimous vote of the house. The senate deferred action, but the bill, together with Barnard's remarks, was printed and circulated among the school officers in the towns. In June, 1845, a new legislature took up the bill, which was then introduced in the senate. Barnard made "a familiar exposition of its provisions, explaining the difficulties of the school

¹⁴ Monroe, p. 16. ¹⁵ Letter dated Washington, Jan. 10, 1867. ¹⁶ 1 Am. J. Ed., 728.

committees," and the bill passed by a large majority and with few modifications. The law went into force on November 1, and through circulars, addresses, etc., Barnard tried to make the transition easy. After nine months' experience of the system, in 1846, Barnard called a convention of county inspectors, town commissioners, and school district trustees to meet in Providence. There all difficulties were discussed, with the proper forms of proceeding from the first organization of a district, and the results were printed in a pamphlet, together with further reflections upon the subject.

After a year's work in the State, at Barnard's suggestion the Rhode Island Institute of Instruction was organized. A preliminary meeting¹⁷ was held in the city council chambers at Providence on December 23, 1844, and a committee, then appointed, reported to a second meeting on January 21, 1845, recommending the establishment of the institute. Barnard then spoke on the necessity of associated and cooperative methods. Frequent meetings must be held and public opinion enlightened if wise and liberal measures are to be adopted. The public press must advocate the desired reforms. Tracts must be printed and circulated. Arrangements had been made to add an educational supplement to the almanacs sold in Rhode Island. County teachers' institutes had been planned, as had been a State normal school. Public libraries and lecture courses were also included in the scheme. Meetings were held very frequently during the succeeding months, with papers and discussions upon such subjects as female teachers, gradation of schools, town libraries, punctuality, the educational needs of Rhode Island, evils of a misdirected education. After the first few months fewer meetings were held, but throughout Barnard's administration the institute met every January to discuss the progress and condition of education in the State. When Mr. Updike heard that Barnard thought of leaving the State, after the passage of the act of 1845, he protested, saying: "You must keep at our head, direct our movements; on your acceptance depends the destiny of the school progress of Rhode Island." Barnard stayed and spent four more years in the State. They were busy years. He was editing the *Journal of the Rhode Island Institute of Instruction* (Vol. III consists of his report for 1848) and preparing a series of *Educational Tracts*,¹⁸ as well as a volume on *Normal Schools in the United States and Europe*,¹⁹ and a more important one on *School Architecture*.²⁰ This was an elaborate work, exhibiting model plans for schools varying in size from one room

¹⁷ 14 Am. J. Ed., 561.

¹⁸ The subjects were: Education in the United States; Education in its relation to health, insanity, pauperism, and crime; The school system of Massachusetts; School-houses; Reading, grammar, composition; and the Cooperation of parents.

¹⁹ Published in 1847 and enlarged in 1850, pp. 670.

²⁰ The fifth edition, with 464 pages, appeared in 1856.

to eight, accommodating 240 children, discussing errors in planning schools, and the true principles of constructing them, the best methods of seating, ventilating, and heating schools, the best school and gymnastic apparatus, suitable titles of books for school, reference, and educational libraries. Hints as to classification of schools, examples of dedicatory exercises, and rules for the care and preservation of schoolhouses are all given.²¹

During Barnard's term of office much was done toward providing new and attractive schoolhouses for Rhode Island.²² The attention of parents and school officers was called to the connection between good schoolhouses and good schools and to the "immense injury done to the comfort and health of children by the common neglect of the ventilation, temperature, and furniture of schoolrooms." Six thousand pamphlets containing plans of schoolhouses were distributed. Detailed plans were gratuitously furnished builders of schoolhouses. Barnard endeavored to secure the erection of at least one model schoolhouse in each county and to interest men of wealth and intelligence in the building of schoolhouses. The school commissioners were instructed not to give public money to districts whose houses were not suitable. As a result Rhode Island was said to have more good and fewer poor schoolhouses in proportion to the whole number than any other State. The school term was lengthened, and something was done toward augmenting school attendance, especially among young children and girls over 12. Schools were better graded and 100 primary schools were placed under women teachers. A few high schools were organized. The course of instruction was made more thorough, practical, and complete. Music, linear drawing, composition, and mathematics as applied to practical life were introduced into many schools, and all studies were taught after better methods from better books. In many schools blackboards had been introduced. Outline maps and globes were also frequently to be found. Uniform textbooks had been introduced into 22 towns, and in 18 of these, through cooperation with the department, at reduced prices. There had come to be a more extensive and permanent employment of well-qualified teachers. Examinations were required to be passed before entering on teaching, and in one year 125 persons were rejected who would have been employed in former days.

The journeys of the agent and the teachers' institutes in the autumns had "helped to train the public in the appreciation of good teachers, and at the same time to elevate the standards and quicken the spirit of improvement among the teachers themselves." Meetings of teachers in adjacent towns had been found useful for the con-

²¹ An abridgment, made for a committee of the American Association for the Advancement of Education, was called *Practical Illustrations of School Architecture*, pp. 175.

²² 1 Am. J. Ed., 728.

sideration of educational topics. Over 30 good volumes on the theory and practice of teaching had been brought within reach of every teacher. The introduction of female teachers had improved discipline, moral influences, and manners. Better men had been secured as school commissioners, and they supervised the schools more efficiently. Before Barnard came not a town or a school society in the State raised a tax for schools, and the city tax amounted to \$9,000 only. In 1846, for the first time in the history of the State, every town voted and collected a school tax, and in 1847 the aggregate amount raised by the town tax to pay teachers was nearly twice that paid from the general treasury. On December 12, 1845, W. H. Welles, a prominent New England teacher,²³ wrote from Andover to the Boston Traveller that Rhode Island had "completely reorganized its system of public schools and incorporated with it the best features of other States." At the same time he wrote Barnard that:

Teachers' Institutes, as organized and conducted by you in Rhode Island, acting at once upon teachers, school officers, and parents, on the home, and the school, is (sic) a new agency in local school work and professional improvement. Your Institutes left the places where held in a red-hot glow. Your separation of practical professional work with teachers, in your day sessions, from popular addresses to parents and the public generally in the evening is most judicious.

A beginning had been made in the establishment of libraries and popular lectures. In 29 of the 32 towns of the State a library of at least 500 volumes had been established, and 17 courses of lectures had "already awakened a spirit of reading, disseminating much useful information on subjects of practical importance, suggested topics, and improved the whole tone of conversation, and brought people of widely differing sentiments and habits to a common source of enjoyment."²⁴ Though apathy had been dispelled, Barnard never felt satisfied, but considered that many things yet needed to be done. All children must be brought into the schools. "Institutions of industry and reform for vagrant children and juvenile criminals must be established." The education of girls had been neglected. Barnard urged that, "if you can educate only one sex, the female children should have the preference, that every home shall have an educated mother." Public libraries must be encouraged.²⁵ "Introduce into every town and every family the great and the good of all past time of this and other countries by means of public libraries of well selected books." He wished Rhode Island to "provide for the professional training, the permanent employment, and reasonable compensation of teachers, and especially of female teachers, for upon their agency must we rely for a higher style of manners, morals, and intel-

²³ N. E. A. Proc., 1901, p. 402.

²⁴ Rev. Noah Porter, in 67 North Am. Rev., 240-249, July, 1848, wrote, in his article on the "Common School in Rhode Island," that this State stirs Connecticut to emulation.

²⁵ 1 Am. J. Ed., 730.

lectual culture." He wished to see a high school established in every town, and scholarships for young men to be established in the county seminaries, or in Brown University. While thus in the middle of his useful career his health failed him, and he resigned on January 25, 1849.²⁶ The legislature asked him to make an oral communication to them in joint convention on the condition and improvement of the public schools.²⁷ He did so, and the Providence Journal wrote that his address was "most eloquent and impressive, and was listened to for nearly two hours with almost breathless attention." The legislature resolved unanimously that Barnard be thanked for the "able, faithful, and judicious manner in which he fulfilled his office."²⁸ On January 30 a silver pitcher was presented him by the teachers of the State.²⁹ In Barnard's reply he stated that—

The cause of true education, of the complete education of every human being, without regard to the accidents of birth or fortune, is worthy of the concentration of all our powers and, if need be, of any sacrifice of time, money, and labor we may be called upon to make in its behalf. Ever since the Great Teacher condescended to dwell among men, the progress of this cause has been upward and onward, and its final triumph has been longed for and prayed for and believed in by every lover of his race. The cause of education shall not fail, unless all the laws which have heretofore governed the progress of society shall cease to operate and Christianity shall prove to be a fable and liberty a dream.

The Rhode Island Institute of Instruction, on February 5, unanimously voted to express to Barnard their high sense of appreciation of his labors.³⁰ Testimonials abound as to the value of Barnard's service to Rhode Island. Horace Mann, in 1856, said that his work there was "the greatest legacy he had left to American educators, the best working model of school agitation and legal organization for the schools of the whole country."³¹

A year earlier, Wayland, in August, 1855, had told the American Institute of Instruction that the establishment of gradation in schools and the improvement in schoolhouses, in the last quarter century, were to be "ascribed more to the labors of Barnard than to any other cause." The results of his work might be discovered in almost every town in Connecticut and Rhode Island. Rev. M. Stone wrote of the work in this fashion:

During the five years previous to Barnard's resignation more than 1,100 meetings were held expressly to discuss topics connected with the public schools, at which upward of 1,500 addresses were delivered. One hundred and fifty of these meetings continued through the day an evening, upward

²⁶ 14 Am. J. Ed., 561; 1 Am. J. Ed., 732.

²⁷ Is this the address referred to as having been given on Jan. 29, 1840, before the Rhode Island Institute of Instruction? 14 Am. J. Ed., 561.

²⁸ Norton, p. 17; Conn. Quar., 125.

²⁹ 1 Am. J. Ed., 734, 735.

³⁰ 14 Am. J. Ed., 561.

³¹ Philbrick, p. 450.

of 100 through two evenings and a day, 50 through two days and three evenings, and 12, including teachers' institutes, through the entire week. In addition to this class of meetings and addresses, upward of 200 meetings of teachers and parents were held for lectures and discussions on improved methods of teaching and for public exhibitions or examinations of schools. In addition to all this, more than 16,000 educational pamphlets and tracts were distributed gratuitously through the State and upward of 1,200 bound volumes on teaching were purchased by the teachers, or added to public or private libraries.

Rev. S. J. May, writing a sketch of Cyrus Pierce, a mutual friend, in Barnard's *American Educational Biography* (p. 421), said that Barnard "framed and set in operation the excellent school system of Rhode Island and has done more than anybody else to regenerate the school system of Connecticut." His "knowledge of the history of this revival of education" was, therefore, "more extensive and thorough" and his "judgment of its causes and effects is more to be relied on than that of any other man."

Similar testimony has come from later writers. Boone²² stated that "in magnitude and detail, in permanency of result and general cooperation, Barnard's work in Rhode Island was—

scarcely second to that of Horace Mann in Massachusetts. It is not extravagant to say that the services of Mr. Mann in Massachusetts and Mr. Barnard in Rhode Island and Connecticut have been the models, in comprehensiveness, system, and general spirit, of most of the inspections and oversight of State schools of the United States for nearly 50 years.

The State which he had benefited remembered him. In 1888 Gov. Taft recommended in a message to the general assembly that a set of the *American Journal of Education* be placed in each public library within the State, and continued that:

In reviewing the history of education in Rhode Island I have been impressed anew with the sense of the great indebtedness of the State to the Hon. Henry Barnard, LL. D. It is not too much to say that no one ever did so much for the cause of popular education in this State as he. He gave to it time, enthusiasm, and intelligence, and also largely of his means.

Mr. John H. Stiness, in an address at the celebration of the seventy-fifth anniversary of the Rhode Island Historical Society in 1897, said of Barnard that "to him more than to any [other] one person do we owe the excellence and efficiency of our present system of public schools."

In the same year the Right Rev. Thomas Clarke, bishop of the Protestant Episcopal Church in Rhode Island, bore testimony that:

The State of Rhode Island has especial cause to remember him with gratitude, as he gave our public-school system a stimulus which it has never lost, and by means of his multitudinous meetings and addresses he inspired the community with an interest in education that never existed before. He was

²² *Education in U. S.*, 1890, 106.

not a man who sought his own, either in the way of fame or emolument; the treasure he laid up for his latter days was not in the form of gold and silver, and he was always as modest and oblivious of self as he was untiring in his labors and indefatigable in his efforts for the good of others. His consistent and spotless life and his patient endeavor to enlighten and arouse the country to the importance of a higher tone of education commend him to our respect and veneration.

Lastly, we may well quote from the address delivered by Thomas B. Stockwell in October, 1898, at the time of opening the new Rhode Island Normal School buildings. Mr. Stockwell was secretary of the trustees, and while expressing his regret that Barnard could not be present for the occasion, he paid him this tribute. He "revolutionized the sentiment of the State. It seldom comes to a commonwealth to be so laid under tribute to a person as our State of Rhode Island is to Henry Barnard, and I am doing him tardy justice in emphasizing the debt that Rhode Island owes him—a debt which she can never repay." Reference was then made to Barnard's plans for two normal schools in the State, one in Providence, affiliated with the city schools and with Brown University, and the other in some rural part of the State, having some features of manual labor connected with it for the benefit of rural schools.

While in Rhode Island, Barnard was never forgetful of Hartford or of Connecticut. He learned of an effort to remove Rev. Thomas Robbins, D. D., to Rhode Island or to Harvard and to have his valuable library remain in one of these places. Barnard at once took up the matter and raised by subscription a fund sufficient to pay Dr. Robbins an annuity for the remainder of his life, provided he would remove to Hartford, become curator of the collections of the Connecticut Historical Society there, and leave his library to that society. Robbins accepted this proposition, and it was Barnard's privilege in 1856, as president of the Historical Society, to pronounce a discourse upon the death of Dr. Robbins.

After the Whigs came into power again in Connecticut in 1844, Gov. Roger S. Baldwin²² spoke in his message to the legislature of the unsatisfactory conditions of the schools and referred to Barnard's work, whereby "a new impulse had been given to the cause of education." Nothing loath to show forth the errors of the Democrats, the legislature empowered the governor to appoint an investigating committee of 9, which reported in 1845, blaming the school societies, and referring to Barnard's work with favor. In the conclusion of their report, for which they had been able to obtain statistics from only 59 of the 214 school societies, they stated: "One fatal deficiency seems to be that the schools are in politics, and the machinery of one party seems to have been captured by the reactionists, or it may have

²² Rep. U. S. Commis. of Ed., 1896-97, Pt. I, p. 782.

fairly represented the numerical majority of the people." As a result of this report the office of State superintendent of education was created, and its duties were given to the commissioner of the school fund.

In 1839 agitation began in Hartford with reference to the transformation of the old Hopkins Grammar School into a town high school.³⁴ Barnard came to Hartford in August, 1845, to attend a meeting of the American Institute of Instruction, of which he was a director, and delivered a lecture before that body. At that time, he interested in the high-school project Mr. James M. Bunce, a prosperous and public-spirited merchant. Barnard made five visits to Hartford in the next year and a half, during which visits he conferred with Mr. Bunce and other persons interested in this matter. In the autumn of 1845,³⁵ Mr. Bunce wrote Barnard, asking him to return to Connecticut, under a pledge of pecuniary and personal cooperation from himself and others," or tell us, at least, how to revive educational interest," which the "disastrous legislation" of 1842 had "almost extinguished."

Barnard replied that he could not leave Rhode Island, but advised the establishment of a high school in Hartford and the placing of all the schools in the city under a board of education, acting through a superintendent. To prepare for the revival of interest, he suggested a teachers' institute. The people of Connecticut must be aroused to the consciousness that their schools needed improvement. He continued:

I shall here work out my plan of school improvement, by educating the public mind up to the appreciation of the necessary conditions of a successful system of public schools, cheap enough for the poorest and good enough for the best citizens, and, at the same time train the agents in the administration of such a system—teachers, officers, and parents. It will take time and work, but I have schooled myself to labor and to wait. The work to be done here is substantially the work which has to be done in Connecticut and every other State—the public must be enlightened as to all the details of the system—the indispensable features of a school law, the requisites of a good schoolhouse, the necessity of regular and punctual attendance, the proper distribution of studies and children into the schools of different grades, and the classification of every school of any grade, and above all as to the qualities and qualification of good teachers and how to select, train, and improve them, and especially to make the most out of such young men and young women as will, until public opinion is made as to the requirements, rush into the business without the requisite knowledge and, especially, without any training or apprenticeship in organizing a school and communicating instruction, and governing and stimulating children by the highest motives.

This letter and the interviews with Mr. Bunce led him to offer a prize for an essay on the "Necessity and means of improving the

³⁴ 28 Am. J. Ed., 233.

³⁵ 15 Am. J. Ed., 390; 14 Am. J. Ed., 263; Rep. U. S. Comm. of Ed., 1896-97, p. 788.

common schools of Connecticut, with measures which can be adopted by a voluntary association to improve the common schools." The prize was won by the essay written by Rev. Noah Porter, jr., then a young clergyman settled over the Congregational Church in Farmington, later to be known as the distinguished philosopher and the well-beloved president of Yale College.³⁶ Porter urged the establishment of teachers' institutes, thorough supervision of schools, opening of a normal school, better salaries for teachers, consolidation of schools, institution of high schools, the taxation of the property of the whole community for the support of public education, and the withholding of aid from the State school fund from every school society which did not raise a tax. All these measures had been advocated by Barnard, and he rejoiced to reëcho Porter's appeal that an effort be put forth to do away with the present educational depression, induce Connecticut to be true to herself, and revive her ancient glory.³⁷

Bunce printed and circulated this essay and also 5,000 copies of one by Barnard entitled: "Considerations on a Public High School in Hartford."³⁸ The educational interests of the State were centering in Hartford.³⁹ In 1846 a convention of 250 teachers met there, having been organized by Rev. Merritt Richardson, of Plymouth, Conn. In February and March, 1847, Barnard spent four weeks in Hartford during the campaign, ended on March 8, in the election, at which it was decided to establish the high school.⁴⁰ In order to influence the vote, he lectured on "Our city and our duties to its past, present, and future" before the Young Men's Institute; presenting the claims of the Connecticut Historical Society, which had recently gained possession of Dr. Robbins's library, and of a rural cemetery, as duties to the past; a liberal and comprehensive system of education as the chief duty toward the present; and precaution against limitations in endowments and institutions, to prevent them from adapting themselves to altered and changing circumstances of a progressive age and country, as the chief duty toward the future.

When the new high school was opened, it was very fitting to invite Barnard to deliver an address. He accepted and what he said there, on December 1, 1847, he repeated nine years afterwards at the opening of the Norwich Free Academy.⁴¹ This new school might solve for the whole country the problem of higher education. Education must be either under the state or the church. "There can not be, there never has been, an efficient system of primary instruction whose officers and teachers were not supplied from public institutions of a higher grade." The curriculum must meet the demands of the age

³⁶ 1 Am. J. Ed., 721.

³⁷ 14 Am. J. Ed., 244.

³⁸ 15 Am. J. Ed., 392.

³⁹ Rep. of U. S. Commis. of Ed., 1896-97, p. 782.

⁴⁰ 28 Am. J. Ed., 233.

⁴¹ 28 Am. J. Ed., 251.

in science, but must not ignore the studies apparently less practical, such as mathematics and the classics—

which, the gathered experience of successive generations of teachers, and the profoundest study of the requirements of the mind of youth, and the disciplinary and informing capabilities of the different kinds of knowledge, have settled to be the best, although not, as I hold, the only basis of a truly liberal scheme of general or professional education. I do not believe that any amount of applied science, and the largest amount practicable should be taught in this and the other institutions of higher learning; or that any attention which may be bestowed on the English language only, and whatever else is taught or omitted, the English language and literature should ever hold a prominent, the prominent, place in the actual aims and results of your scheme of study, can ever train the three great faculties of reason, memory, and imagination to their full, natural, and harmonious development.

He also urged that the course of study should deal with the phenomena and duties of everyday life, that women be used as teachers, and that the cooperation of all the community be sought, to the end that there might be secured the "free struggle of children and youth, of the same age, of both sexes, and of every condition, for the masters of the same knowledge, and the acquisition of the same mental habits in their classrooms under accomplished teachers."

While in Rhode Island,⁴² Barnard also aided greatly Mr. Seth P. Beers in the preparation of his four annual reports as superintendent of the common schools of Connecticut under the act of 1845, as well as in the preparation of circulars relating to returns from schools. In the second report, that for 1846, was contained a recommendation that teachers' institutes be held. In October, such an institute was held in Hartford and was addressed by Rev. Drs. Gallaudet, Hawes, and Bushnell, and Messrs. W. A. Alcott, J. Olney, D. N. Camp, Rev. M. Richardson, N. L. Gallup, and J. E. Lovell. Other institutes were held in the spring of 1847, and, in May of that year, the legislature authorized the holding of at least two schools for teachers in each county, between September 15 and October 31, for "the purpose of instruction in the best modes of governing and teaching our common schools." Sixteen county institutes were then held, and in 1848, after a renewed recommendation, a permanent provision for them was made by the legislature. Their success secured the founding of the normal school in 1849, but that is "another story," to be treated in the next chapter. We catch fleeting glimpses of Barnard's private life⁴³ throughout the years of his Rhode Island sojourn. In August, 1844, he went on a trip to Maine, to attend the meeting of the American Institute of Instruction and lecture

⁴² 15 Am. J. Ed., 390.

⁴³ On Apr. 7, 1847, he became a member of the New England Historical Genealogical Society, 56 N. E. H. G. Reg., 173.

thereto on the difficulties attending common schools and their remedies. In that same year H. S. Randall wrote him admiringly of his power of reading aloud from Coleridge's translation of Wallenstein. In 1846 he was suddenly asked, five days before commencement, to deliver the Φ B K address at Yale. He retired to Point Judith Lighthouse, and wrote a skeleton of the address which he successfully delivered. When the American Institute of Instruction met at Plymouth, Mass., in the same summer, he was present and gave an address upon "The obligation of towns to elevate the character of the schools." In the autumn of that year he took a western tour of five weeks for his health, since he always found it difficult to work with moderation. Availing himself of this opportunity to extend his educational propaganda, he delivered addresses⁴⁴ at Chicago, Milwaukee, Madison, Ann Arbor, Detroit, Sandusky, Cleveland, Columbus, and Cincinnati. Of this and other early journeyings of Barnard, Mayo wrote:⁴⁵

He was, perhaps, the first of our eminent northern educators, of the many who were called to the management of southern educational foundations, to visit that section of the Union as an advocate of what has since become in fact, though not in legal form, our American system of common schools, for all classes and conditions of the people. * * * His early excursions through the Western States, then experimenting on their present systems of public institutions, had enlarged his ideas of the possibilities of the common school, the most original of our American new departures.

This tour had momentous results for him; for, during it he met his future wife. The story can not be better told than in the words of his daughter, Miss Josephine E. Barnard, contained in a letter written on May 15, 1915:

My mother's maiden name was Josephine Desnoyers, and my father met her in Detroit, when on a visit to his classmate, Mr. (afterwards General) Alpheus Williams. The very day he arrived Mr. Williams urged him to go with him to the wedding of a friend. My father pleaded fatigue after his long journey and excused himself. "You'll be sorry if you don't go," says Williams, "there is going to be an awfully pretty bridesmaid," and he went, to his everlasting blessing. My grandfather, Peter Desnoyers, was sent away from Paris in 1790 to escape the conscription. His father, Jean Charles Desnoyers, was a member of the Garde Nationale (Bataillon de Henri Quatre) Juillet, 1789, and his brevet certifies that he served "avec toutes les qualites d'un digne citoyen." Nevertheless, he seems to have thought France a poor place for his 18-year-old son, and bought for him an interest in the Scioto Land Co. and sent him to America, where he arrived at Havre de Grace, Md., after a voyage of 60 days. On landing, the French (settlers) went directly to Gallipolis, Ohio, which was supposed to be within the company's domain. They found that the title deeds were worthless, the land company failed entirely, and the settlement was ultimately broken up. Later, young Desnoyers accompanied Wagner's army, on its way to the Northwestern Territory. He arrived in Detroit in June, 1796, and after some struggling years, became a successful merchant

⁴⁴ 15 Am. J. Ed., 390.

⁴⁵ Rep. U. S. Commls. of Ed., 1902, p. 892.

and a prominent member of the prosperous community. He married a French Canadian, Miss Marie Louise Gobielle, and my mother was the youngest of 12 children.

On September 6, 1847, Barnard returned to Detroit to marry Miss Desnoyers and spent his honeymoon with her at Saratoga Springs. This marriage, between a French Roman Catholic and a Connecticut Puritan, turned out to be a most happy one. Five children were born to them, of whom two unmarried daughters alone survive. The only son, Henry D. Barnard, after studying at Heidelberg, returned to America, and settled in the practice of law at Detroit. He had fine prospects, and entering local politics was chosen president of the city council, but died in 1884 at the early age of 32, leaving a widow and an infant daughter. Mrs. Barnard was an invalid for the last 20 years of her life and died in 1891. In writing a note of sympathy to the bereaved husband, Miss Emily V. Mason, who had been an early friend in Detroit of Mrs. Barnard, remarked upon her purity and goodness, her refusal to dance, her delicacy which led her to refuse ever to wear a low-necked dress, and the "simplicity and modesty with which she met your poetic courtship."

Chapter VI.

STATE SUPERINTENDENT OF EDUCATION IN CONNECTICUT (1850-1855).

When Barnard resigned his position in 1849, a printed circular was sent to a number of persons, proposing that a professorship of popular education be established in the department of philosophy and the arts in Yale College and that Barnard be selected to fill the chair,¹ a selection to which the president and prudential committee of the college had agreed. If called to the chair, he was expected to deliver a brief annual course of lectures, to which all suitable persons should be admitted, either gratuitously or for a very low fee. This course would benefit the student and bring to New Haven a large number of persons from many States of the Union, "intending to embrace a full course of classical education." The circular stated that:

The establishment of such professorships in our colleges will tend to give them a stronger hold on the popular mind, will unite our higher and lower educational institutions by a stronger and more active sympathy, and will help to convert our present various and sometimes conflicting modes of instruction into a uniform and efficient system.

Nothing came of the movement, however. About this time Barnard declined professorships of history and English literature and of Latin and Greek in two colleges, and school superintendencies in Boston, New York,² Cincinnati, and New Orleans.³ Gov. Seward and others suggested⁴ that he travel through the country and deliver addresses so as to elevate the public sentiment as to education.⁵ He was elected president of the Universities of Indiana and of Michigan, and had resolved to accept the latter position when an accident caused by a runaway horse impaired his health for the time, so that he was forced to relinquish the plan.⁶ On October 17, 1849,⁷ a national convention of the friends of common schools was held at

¹ On Aug. 15, 1858, Barnard presented to the Yale corporation a plan for the establishment of a professorship of the art of teaching, which was laid on the table. (Stokes Memorials of Eminent Yale Men, I, p. 261.)

² 1 Am. J. Ed., 736.

³ Hughes, N. E. Mag., N. S., vol. 14, p. 567, 1896.

⁴ In his career he is said to have addressed the legislatures in 10 States and delivered lectures in 50 cities.

⁵ 1 Am. J. Ed., 738.

⁶ Rep. of Commis. of Ed., 1902, I, p. 894.

Philadelphia. The call for the meeting was signed by Bishop Alonzo Potter, Horace Mann, who presided over the meeting, Barnard, and 34 others. Barnard was appointed chairman of the business committee, and as such reported a resolution, which was adopted, that a committee of five be appointed to prepare a memorial to Congress asking the "establishment of a bureau in the home department for obtaining and publishing annually statistical information in regard to public education in the United States." As chairman of the business committee he also proposed 10 topics for consideration "relating to the organization and administration of a system of public instruction, adapted to different sections of the United States," and as chairman of other committees he had the tasks given him of preparing rules which ought to regulate the future legislation of States and towns concerning the formation of school districts and "a digest of the school system and educational systems of the several States."

At the second convention, held in Philadelphia on August 28, 1850, Barnard again served on the business committee and reported that during the past decade he had collected more than 1,000 documents for the purpose of preparing a history of education in the United States, upon which he would present a report later.^{6a} Dr. Barnard made a partial report in August, 1851, to the third convention, held in Cleveland, at which time the convention organized itself into the American Association for the Advancement of Education. Barnard was made a member of the standing committee and chairman of a committee to report upon "the value of education to the industrial interests of the country." He was also asked to append to the published proceedings a "condensed form of the statistics which he has collected in regard to systems of education in different States."⁷ It was before this association in 1854 that, after speaking of the Educational Exhibition in London, which he had recently visited, he laid out the Plan of a Central Agency for Education,⁸ with a paid secretary, a journal, a library of 32 volumes, including a history of national education in the United States, and an educational exchange between literary institutions in this and other countries. A year later he presided at the New York meeting of the association, when, on account of lack of funds, the decision was made to take no action in regard to this plan.

^{6a} At the meeting of the American Institute of Instruction held at Montpelier, Vt., in August, 1849, Barnard was present and made some very interesting and spirited remarks upon education. The institute passed a resolution that "we have the utmost confidence in Mr. Barnard's ability to prepare a history of education and that we will afford him every aid within our power."

⁷ This body of educators was succeeded by the National Teachers' Association in 1856.

⁸ Rep. of U. S. Commls. of Ed., 1902, I, p. 895; 1 Am. J. Ed., 8, 134.

We come upon notices of other of Barnard's addresses from time to time. In 1851 he spoke on Progress of a Quarter Century, before the American Institute of Instruction at Northampton, Mass., and on October 10 he addressed the Connecticut State Teachers' Association, at Washington,⁹ and, praising the society of New Preston in that town, spoke of the great men who came thence. This meeting was the first of a series, at each of which Barnard spoke for two hours. On October 14, at Colchester, his subject was the elements of a good system of public schools; on October 21, at Essex, he praised the conditions at Deep River and deplored the lack of interest in Essex; on October 21, at Norwalk, he spoke on the gradation of schools. Later meetings were those at Glastenbury, on October 28, and Ashford on October 29. The elements he touched upon in his Colchester speech¹⁰ were: (1) A good school law; (2) a good schoolhouse; (3) punctual and regular attendance; (4) a good classification of schools; (5) a good course of study; (6) a good series of textbooks; (7) a good teacher; (8) a good committeeman; (9) a good parent; and (10) a good district or society.

In 1853, at the Centennial Anniversary of the Linonian Society at Yale, he made a fine impromptu speech, when the appointed orator failed.¹⁰ At this time was printed his "Tribute to Gallaudet, a discourse in commemoration of the life, character, and services of the Rev. Thomas H. Gallaudet, LL. D., delivered before the citizens of Hartford, January 7, 1852."¹¹ This address was also delivered at New Britain in 1851, at the annual meeting of the Connecticut State Teachers' Association,¹² of which Barnard was president in that year.¹³ Of this presidency he wrote that he "tried to bring the teachers into an active participation in the work of school advancement and to the responsible management of all the essential agencies of professional improvement." About this time Barnard received three signal honors, being granted the degree of LL. D. by Yale and Union in 1852 and by Harvard in 1853.

On August 7, 1849, Barnard had been chosen principal of the Connecticut Normal School, at New Britain,¹⁴ and superintendent of common schools of the State, under the act of June 22, 1849.¹⁵

⁹ 81 Am. J. Ed., 521.

¹⁰ V. Conn. Com. Sch. Jour., 59.

¹¹ N. E. Mag., N. S., vol. 14, p. 563.

¹² With an appendix containing a history of deaf-mute instruction and institutions and other documents, pp. 220. Part of the matter is reprinted from the Conn. Com. School Journal. An edition in 1852, with the History of the American Asylum, is said to have contained pp. 268.

¹³ 15 Am. J. Ed., 593.

¹⁴ The association had been formed at a convention in Hartford County in 1846.

¹⁵ Agitation for the establishment of the Lexington Normal School began in 1835, and the school was opened in 1839. Gov. Seward, of New York, recommended one in that State, and it was opened in 1844. N. E. A. Proc., 1901, p. 394.

¹⁶ 14 Am. J. Ed., 274.

Holding these positions, he delivered the dedicatory address at the opening of the school's building on June 4, 1851, then beholding the consummation of the project urged by him upon the State 18 years earlier.¹⁶ In his address of an hour,¹⁷ Barnard glanced at the idea of a school with groups of scholars under the systematic training of a teacher and traced its history to Christ's taking a child in his arms. Then he gave a historical sketch of normal schools from the founding of an institution in Rheims in 1681, by Jean Baptiste de la Salle, for the Brothers of the Christian Doctrine, and from Herman Franke's orphan house in Halle. There were then 264 teachers' seminaries in Europe and only 7 in the United States. Next he dwelt upon the course of instruction and, in closing, he called the attention of his hearers to the fact that no normal school had failed. If this one fails, the failure will be due to lack of adequate entrance qualifications, sufficient permanence of residence, adequate appropriation from the State, or suitable encouragement given "by adequate compensation and continued employment from year to year in the same school of well educated and thoroughly trained teachers." On the same day Rev. Horace Bushnell also spoke and told how Barnard had consulted him in 1838 as to giving himself up to the public schools. He made his choice to do so, and—

after encountering years of untoward hindrance here, winning golden opinions meantime from every other State in the Republic and from ministers of education from almost every nation of the old world by his thoroughly practical understanding of all that pertains to the subject, after raising also into vigorous action the school system of another State and setting it forward on a tide of progress, he returned to the scenes of his beginnings and permits us to congratulate both him and ourselves on the prospect that his original choice and purpose are finally to be fulfilled. * * * He has our confidence. We are to have his life and experience.

The idea of a normal school, first enunciated by Olmsted in 1816,¹⁸ had been emphasized by Gallaudet in 1825, who had urged, in articles printed in the Connecticut Observer, at Hartford, that teaching be made a "profession," and that there be established "institutions for the training up of instructors for their sphere of labor, as well as instructions to prepare young men for the duties of the divine, the lawyer, or the physician."

In 1838, Barnard, speaking in the Connecticut house of representatives,¹⁹ said that there was need of "better education and special training of teachers for their delicate and difficult labor." "Every man who received his early education in the district schools of Connecticut must be conscious of the defective instruction," due both to a lack of knowledge on the part of the teacher and of a "practical

¹⁶ Monroe, 19; 1 Am. J. Ed., 736.

¹⁷ 10 Am. J. Ed., 34.

¹⁸ Rep. U. S. Commls. of Ed., 1896-97, I, 793.

¹⁹ 10 Am. J. Ed., 24.

ability to make what he does know available. He has never studied and practiced his art—the almost creative art of teaching.” It is “idle to expect good schools, until we have good teachers * * * With better teachers will come better compensation and more permanent employment. The people pay now quite enough for the article they get. It is dear at even the miserably low price at which so much of it can be purchased.”

In his first report as secretary of the State board of education, in 1839, he urged the establishment of at least one seminary for teachers and, while defending in the house a bill for teachers’ institutes or a seminary, he maintained that good teachers would make better schools, and that, in time, “college graduates will no longer be hired to teach the alphabet, but accomplished female teachers, who can do the work of the primary schools best.” Teachers were the “natural guardians,” in his opinion, of this great interest, at least they are the cooperators with the parents in this work of educating the rising generation to take the place of that which is passing off the stage. They are the chosen priesthood of education. They must bear the task on their shoulders. Teachers’ institutes are good, but should “create in the existing teachers a thirst for something better than can be given in any temporary course.”

In the report of 1840, recommending an appropriation for a teachers’ seminary, Barnard said in behalf of the commissioners, that a teacher without preliminary training is like a “medical practitioner who commences his labors without the knowledge of the settled principles of his art, but expects to gain his knowledge of his profession in the course of his practice.” Again, in his report of 1841, he spoke of the need of examining boards for teachers in each county or senatorial district, and of the further need of improvement of the sources relied on to supply teachers. He suggested that older students in the schools might be taught how to teach the younger ones; teachers’ classes might be instituted in the winter and spring; and most of all there was a need of separate institutions in which the exclusive attention of able men should be devoted to “the distinct object of giving the greatest practical elevation and efficiency to the profession of common school teacher.” For the last time in that report, Barnard urged a normal school and thought that this institution had better be confined in the outset to the preparation of female teachers. Those who attend it should be obliged to promise to teach two or three years in the common schools. The good that they would do would not be confined to the districts in which they would teach. An appropriation of \$10,000, together with what could be raised by individuals, would suffice to give the plan a fair trial.

After Barnard had gone to Rhode Island, in 1844, a committee of eight members of the house of representatives was appointed to con-

sider the state of education in Connecticut and report to the next session of the legislature. In May, 1845, they recommended the establishment of a normal school, since "teaching is an art." Nothing was then done, but in 1846, the general assembly approved, in the main, a plan of the joint standing committee of education for a normal school. In 1847, Mr. Beers, the superintendent of education, recommended the opening of such a school, since it would give an opportunity to teachers to learn their art before taking schools. The report was referred to the joint committee, which visited normal schools in Massachusetts and New York and recommended to the general assembly of 1848 the establishment of such a school. Another year passed before anything was done, and then an act was passed for the establishment of a seminary for the training of teachers in the art of instructing and governing the common schools of the State. For this purpose the sum of \$11,000 was appropriated, which amount had been paid by two banks as a bonus for their charters. On February 1, 1850, the school was located at New Britain, because of inducements offered by the people of that town. Mr. Seth J. North gave \$6,000, and much of the cost of the \$25,000 building came from other citizens of New Britain.^{19a} Without waiting for the completion of the building, or the purchase of apparatus or library,²⁰ the school was opened on May 15, 1850, "under as favorable auspices, as to pupils and opportunities for imparting practical knowledge, as any other of the seven normal schools then existing in the Union." At the close of the first week there were 55 students, who were allowed to use as practice schools four district schools with 300 students.

When Barnard accepted the principalship, he did so with the understanding that an assistant principal should be appointed to take immediate charge of the school, and Rev. T. D. P. Stone assumed that position, leaving for it his former post as superintendent in the department of instruction in the Massachusetts State Reform School at Westboro. Barnard gave such attention²¹ as he "found compatible with the general supervision of the common schools of the State, for which his studies and previous experience" had "in some measure qualified him."

By the act which established the normal school and placed it under the direction of a board of eight trustees, the superintendency of the common schools had been united with the duties of the principal, instead of with those of the commissioner of the school fund. This was done at the recommendation of the commissioner, and the new officer was given a salary of \$3 per diem while actually employed and his expenses while traveling, with an allowance for sta-

^{19a} 10 Am. J. Ed., 47.²⁰ 32 Am. J. Ed., 582.²¹ 14 Am. J. Ed., 275.

tionery, printing, and clerk hire. The superintendent had placed upon him the duty to collect information from school visitors and to submit an annual report to the general assembly, with a statement of the present condition of the common schools, plans for their improvement and for a better organization of the common school system. During each autumn, he should hold in each county a school or convention of teachers for the purpose of interesting them in the best modes of governing and teaching their schools.²² This law provided for an encouragement of local taxation, for graded schools, and for a reduction of the number of school officers, and made possible the return of school management to the town. It is said that there were at that time in Connecticut 1,650 independent school districts, 10,000 school officers, and 75,000 children of school age.²³

In his first report, made to the legislature at its session in May, 1850,²⁴ Barnard laid out his plans for the normal school. Even one term in residence there would be of use; even a visit to the school for an hour by a teacher or candidate for teaching would be encouraged. The curriculum would include English, penmanship, drawing, vocal music, physiology, and to advanced students, agricultural chemistry and domestic economy. Subjects, rather than textbooks, would be taught. Elementary subjects would be reviewed by practice on blackboards and by aid of maps and cheap and simple apparatus. Lectures would be given on the history and theory of education, school architecture, and the legal position of the teacher. The pupils were expected to visit schools in their vacations and to attend educational meetings. Barnard believed it to be important to cultivate a truly religious feeling, to lay the foundation and implant the motives of a truly religious life, to enable teachers, by precept and example, rightly to develop the moral faculties and to define and enforce the performance of all the great primary moral duties in the schools which may be placed under their charge.

Consequently, every suitable effort, consistent with perfect religious toleration, will be made to give a deep moral and religious tone to all the exercises and to the whole character of the institution, from a deep conviction that a sense of responsibility to God and love to man must form the mainspring of a teacher's activity, while it is the surest pledge of success.

There would be occasional lectures from nonresident scholars. The faculty would endeavor to find positions for the pupils, and would try to—

grapple, as with bands of steel and yet only by the sympathy of a common pursuit and the sense of reciprocal benefit, the pupils to the school and the

²² 14 Am. J. Ed., 275.

²³ Barnard's History of legislation in Connecticut respecting common schools, Rep. of U. S. Commis. of Ed. 1896-97, I, 794.

²⁴ 32 Am. J. Ed., 582.

teachers of the State to each other and to unite all hearts and all hands in the great work of the more complete, practical, and universal education of the children of Connecticut.

The officers of the school, so as to extend its influence, intended to be present at the teachers' institutes throughout the State.

This school was a success from the start. It is true²⁵ that for two years it was little more than a permanent normal institute, receiving teachers and pupils of all grades for even less than one term, and adjusting its terms to those of the winter and summer schools. In the third year a permanent annual appropriation of \$4,000 made it possible to organize a systematic course of instruction. Before 1860, one thousand five hundred teachers had studied there, of which number one-third were still teaching, a fact which shows the lack of permanence in the occupation.²⁶ In 1855, after the school had been four years in operation, Barnard wrote,²⁷ as he retired from office, that he hoped: (a) That the institution will become an indispensable feature of the common school system, having as one reason for his hope that no normal school once opened had ever been abandoned; (b) that it will furnish a place where young people "can acquire the science and art of teaching, without a series of experiments made at the expense of health, faculties, and the affections of the children," and will give teachers what men entering other professions receive from their preliminary training; (c) that it will make teaching a "permanent employment"; (d) that it will help to "verify the vocation of persons entering the profession and make a school an uncomfortable place for a person whose heart is not in the work"; (e) that the schools conducted by the graduates will become models for the other districts and that a wholesome spirit of emulation will thus be provoked; (f) that the standard of the qualifications required from teachers and the wages paid to them will be raised, that old schoolhouses will disappear, and that boarding will no longer remain a hindrance to the formation of a permanent well-qualified body of teachers; (g) that the school will unite with the teachers' institutes to inspire and strengthen a professional feeling among teachers; (h) that it will build up a professional literature; and (i) that, in a few pupils, it will produce an "enthusiastic attachment to their future profession as the noblest, holiest department of human exertion" and through them will give "an impulse of the most powerful kind to education." All that the officers of the school asked was a "fair field and reasonable cooperation" from the people of the State.

²⁵ Rep. U. S. Commis. of Ed., 1898-97, I, 794.

²⁶ 10 Am. J. Ed., 47.

²⁷ 32 Am. J. Ed., 583.

During Barnard's term of office he had the hearty support of the State administration. Gov. Thomas H. Seymour, in his message to the legislature in 1850, wrote thus of Barnard:

Though laboring often ^{as} under the most discouraging circumstances, he has steadily pursued the lofty purpose which he has had in view, with an industry and perseverance which nothing short of a well-founded faith in the justice of the cause could have inspired. From his report it will be seen that, while schools, in connection with other institutions, are making education the common property of every child in our midst, there is still left room in our system of public instruction to carry out and enlarge what our fathers so admirably began.

The report alluded to, viz, Barnard's first and the fifth of the superintendent of common schools to the general assembly, is a pamphlet of 160 pages. From it we learn that teachers' institutes had been held in every county and were attended by 75 teachers, mostly from the winter schools:

The object and legitimate scope of these meetings must be, not to become a substitute for the patient, thorough, and protracted study which the mastership of any branch of knowledge requires, nor yet for the practical drilling which a well-conducted normal school alone can give, but to refresh the recollection of principles already acquired, by rapid reviews and by new and safe methods of presenting the same, to communicate hints and suggestions in aid of self-improvement from wise and experienced instructors, to solve the difficulties and doubts of the inexperienced and to enkindle through the sympathies of numbers, engaged in the same pursuits, the aspirations of a true professional feeling.

He attended 12 meetings of teachers' associations and suggested a small grant for them. General supervision had been given to schools. He had advised them on all possible subjects, but regretted the lack of reliable information upon many points.

Barnard wrote:

Scattered all over our territory, through every city and village and neighborhood and even in the secluded nook, or rocky and wooded waste, if there the family has planted itself with its domestic relations, the district school is to be seen, with its doors open to receive the children of all classes, for at least four months in the year, and these schools, in connection with private schools of various grades and the press and the pulpit and the practical working of our domestic and civil instructions, secure not only an elementary education, but a vigorous self-training, as the birthright and the birth blessing of every child of the State.

More must yet be accomplished. The parental apathy must be removed, districts should be abolished, and a graded system established in each town or school society. Public lectures should be given, articles written for the press, essays or tracts published upon such topics as the history of education in Connecticut, the actual condition of education there and a comparison with the condition in

other States, school architecture, the attendance and classification of children, school systems for cities and large villages, the normal school textbooks and school apparatus, school supervision, school support, parental and public interest. More money must be appropriated for schools.

As education is a want not felt by those who need it most for themselves or their children; as it is a duty which avarice, or a short-sighted self-interest, may disregard, as it is a right which is inherent in every child, but which the child can not enforce, and as it is an interest, both public and individual, which can not safely be neglected, it is unwise and unjust to leave it to the sense of parental duty, or the unequal and insufficient resources which individuals and local authorities under the stimulus of ordinary motives will provide. If it is thus left, there will be the educated few and the uneducated many. This is the uniform testimony of all history. The leading object should be for the State to stimulate and secure, but not supersede, the proper efforts of parents and local authorities, and to see that the means thus provided are so applied as to make the advantages of education as equal as the varying circumstances of families and local communities will admit.

In his next annual report,²⁹ Barnard alluded to the holding of 14 teachers' institutes, with an attendance of 1,200 persons, at an expenditure of only \$400. He expressed the opinion that there were too many private schools and that an educational qualification should be required of voters. Early and regular attendance should be required of each child, at least until 10 or 12 years of age.

Every child should attend the best school, be it public or private; but, other things being equal, a public school of the same grade will be the best school; and, if it is the best school in all the essential features of a school, the social and indirect benefits to the individual and the community from the early school associations of all the children, from the families of the poor and rich, the more and the less favored in occupation and outward circumstances, are such that, as far as practicable, all the children of a neighborhood should attend the public school.

The State of Connecticut consisted of two classes of communities. The majority of the people yet lived in the country. Not foreseeing the tremendous growth of the urban population, Barnard wrote that:

First in point of numbers, here as elsewhere, the agricultural population will ever be of the highest importance to the dignity and strength of the State * * * The sparseness of the population forbids the concentration of schools into large districts and the consequent gradation of schools, which is so desirable and even essential to the thoroughness of school instruction.

On the other hand, in the country, there is found more "bodily energy and the freshness and force of mind which are consequent upon it." The country schools had usually been badly taught and the scholars had no other advantages from library or lyceum. Among the improvements urged are better schoolhouses, the employment of female teachers for small children during the whole year, the gath-

²⁹ Sixth report, p. 168.

ering of older children together in the winter from a "wide circuit of territory," the fostering of the taste for reading by the establishment of school libraries, and the modification of the course of study, so that "it should deal less with books and more with real objects in nature around, more with facts and principles which can be illustrated by references to the actual business of life." In the manufacturing districts, on the other hand, the children need different treatment. There gradation of classes is possible. Drawing, mathematics, and needlework should be emphasized. Teachers should be able to explain elementary natural science and "should take decided interest in everything that related to the moral and intellectual improvement of the people."

Libraries of good books, selected in reference to the intellectual wants of the old and the young, should be provided in every village. To create a taste for reading should be a leading object in the labors of teachers and lecturers. All that the school, even the best, where so much is to be done in the way of disciplining the faculties,²⁰ all that the ablest lecture, when accompanied by illustrations and experiments, can do toward unfolding the many branches of knowledge and filling the mind with various information, is but little compared with the thoughtful perusal of good books, from evening to evening, extending through a series of years. These are the great instruments of self culture, when their truths are inwrought by reflection into the very structure of the mind and made to shed a light on the daily labors of the workshop.

Small museums and libraries, with rooms for reading, games, conversation, and lectures, will bring all classes together. High schools, evening schools, reform schools, uniformity of textbooks, are all advocated in this report.

In 1852 the Connecticut Common School Journal was resumed and was continued by Barnard until January 1, 1855, when he turned it over to the State Teachers' Association. In his seventh report, that for 1852, he wrote that nine teachers' institutes had been held during the year, with an attendance of 900. Each lasted from Monday until Friday, and at each institute educational addresses had been delivered, especially by the clergy. The gradation and consolidation of schools, the examination of teachers by county inspectors, the distribution of school money on the basis of attendance are among the subjects discussed. In July, 1852, Barnard resigned his position on account of his health, for the restoration of which he had been ordered to take a sea voyage.²¹ The trustees declined to accept his resignation, but asked him to take a leave of absence. He did so and a trip to Europe proved so restorative that he was able to go on with his work. In August, 1853, at New Haven, Barnard lectured before the American Institute of Instruction upon "Practical lessons to be drawn from an educational tour of Europe." On

²⁰ 15 Am. J. Ed., 307.

²¹ 15 Am. J. Ed., 329.

his travels he had collected information and ideas, some of which he thought might well be adopted in America, though—

the public schools of Europe, with their institutions of government and society, do not turn out such practical and efficient men as our own common schools, acting in concert with our religious, social, and political institutions; * * * but this superiority is not due to the school, but it is gained in spite of the school. Our aim should be to make the school better and to bring all the influences of home and society, of religion and free institutions, to perfect harmony with the best teaching of the best teacher.

He found the Prussian youths²² "subjected to the depressing and repressing influences of a despotic government and of a state of society in which everything is fixed both by law and the iron rule of custom." On October 28, 1853, Barnard addressed the Barnard and Gallaudet Library Societies in the New Britain Normal School upon the results which may be reasonably anticipated from an improved system of popular education, instancing as such results: (1) Increased productive power of manual labor, (2) improvements in machinery, (3) better care and higher utility with which articles of daily use would be constructed, (4) the increase of cheap, innocent, and humanizing amusements, and (5) the spread of a better and more powerful American literature.

In his eighth report, that for 1853, Barnard referred to 10 teachers' institutes which had been held with an attendance of 1,000 teachers. Nine teachers' association meetings had been held and 275 addresses delivered.²³ At the New Britain Normal School there had been 324 students during the year 1852, and 183 were in residence there when he made his report. He had made arrangements with the managers at the penitentiary at Wethersfield whereby the convicts were employed in making school apparatus, which thus could be more cheaply supplied to the schools. "Our aim should be to make the schools better and to bring the influences of home and society, of religion and free institutions, into perfect harmony with the best teaching of the best teacher." In accordance with this wide purpose he sought for the primary schools female teachers "of the requisite tact, patience, versatility, and prompt and kind sympathies." He referred to the many monographs which he had in preparation, to the kinds of schools needed in the different classes of communities, and to the memory of Dr. Gallaudet—"the best lights of my own mind have been drawn and fed from his wise counsels and the best purposes of my own heart have been strengthened by the beauty of his daily life."

This report is largely devoted to his extremely valuable History of Education in Connecticut, of which a second edition was printed in

²² 15 Am. J. Ed., 331.

²³ 15 Am. J. Ed., 307.

1856.³⁴ During these years, his fame became international. Dr. Wimmer visited the United States for two years,³⁵ and on his return to Germany wrote:³⁶ "I have often had occasion to admire the magic influence of Dr. Barnard, his brilliant powers of eloquence, and his great administrative talent." He is a "veritable reformer of popular education."³⁷ Karl Quentin, another German scholar, visited Barnard in Hartford in 1850 and wrote that Rhode Island owed to his farsighted and energetic administration a school system to be compared to Massachusetts.³⁸ The Swede, P. J. Siljestroem,³⁹ also visited him about the same time.⁴⁰ Thomas Rainey, editor of the *Ohio Journal of Education*, made a tour through New England in January, 1852, and stopped at Hartford to see Barnard, finding him at work in a corner of a dingy garret in the old State House, trying to escape the rain which dripped in from a leak in the roof, and described him as "the perfect embodiment of all the educational interest and intelligence of New England. He has done more than any other 10 men in New England for education."⁴¹ In 1855, Prof. LeRoy, of Liege, called him "that indefatigable apostle of progress and distinguished educator."⁴²

In 1854, Barnard was commissioned by the governor of Connecticut as a delegate to the International Exposition of Educational Methods held in St. Martin's Hall, London, and on his return, he made an oral report to the Connecticut legislature.⁴³ On July 4, he was one of the 800 people who attended the centennial dinner of the Society of Arts in the Crystal Palace and was honored by being asked to sit at the head table and answer to the toast "Our foreign visitors."⁴⁴ While in London, Barnard made arrangements with the principal delegates, school officers, and teachers, to secure a reliable account of the systems of national education in their several States by men familiar with the details thereof, for publication in his projected *Journal of Education*. This project developed into the volume prepared while United States

³⁴ Afterwards reprinted in *Am. J. Ed.*, IV, 657, 710; V, 114; XIII, 725; XIV, 244. 2 *Conn. Com. Sch. Jour.*, N. S., 505. Jules Paroy, *Historie Universelle de la Pedagogie*, 1883, p. 366, praised Barnard.

³⁵ Wimmer in 1846 had been the first person to call Barnard's attention to Froebel. 2 *Conn. Com. Sch. Jour.* N. S., 505. Jules Paroy, *Histoire Universelle de la Pedagogie*, 1883, p. 366, praised Barnard.

³⁶ Vide *Conn. School Jour.*, 1855, p. 89, for review. "Die Kirche und Schule in Nord Amerika," Leipzig, 1853, was the book.

³⁷ Hughes, p. 570.

³⁸ *Reisebilder u. Studien aus dem Norden der Vereinigten Staaten von Amerika*. Zwei Theile in einen Bande. Ost-West, Arnberg, 1851, pp. xvi + 152, vi + 209.

³⁹ *Ed. Institutions of the U. S.*, English ed., 1853.

⁴⁰ He wrote on Apr. 23, 1850, after the visit, that he had spent Easter as the guest of Miss Emily Harper, in Baltimore, and must soon return home.

⁴¹ Hughes, p. 569.

⁴² Hughes, p. 570.

⁴³ Monroe, p. 27.

⁴⁴ Vide 2 *Commis. Conn. Sch. Jour.* (N. S.), 88, for his speech. A printed report of Barnard's impression of the exposition was also made to the governor of Connecticut.

Commissioner of Education in 1870, but the original plan was much broader. The work was to consist of six parts: (1) Elementary education; (2) secondary education; (3) universities, colleges, and other institutions of superior instruction; (4) professional, classical, and special instruction; (5) supplemental instruction by means of libraries, lectures, and evening schools; and (6) societies and museums for the promotion of education, science, literature, and the arts.⁴⁵

At this time, too, Barnard was vainly hoping for the accomplishment of another of his desires. In 1837, noting that the Rensselaer Polytechnic Institute, at Troy, inadequately met the demand for engineers and practical chemists and geologists, Barnard called public attention to the need of special schools for teaching, with "special reference to the great national industries—to commerce, locomotion, machinery, manufactures, mining, engineering, and civil constructions of all kinds." This address was issued in 1839 and made a part of his report in 1839-40. He reissued it in 1847, while in Rhode Island, and again in 1853, in a volume entitled "National Education in Europe." In 1852, Mr. Samuel Colt, the inventor of the revolver, contemplated the establishment of evening classes, which plan developed into one for a School of Mechanical Engineering and a Polytechnic School. Two years afterward, Mr. Colt made Barnard one of the trustees and asked him to gather information, which he did, printing several articles in the *American Journal of Education*. In 1862, Colt died, and it was found that he had revoked by a codicil the provision in his will intended to create this institution. Mrs. Colt, in the succeeding year, requested Barnard to resume the collection of information. A volume on Military Education was printed in advance of the rest, but after the armory was burned in 1865, Mrs. Colt abandoned the plan entirely.

In 1854, one of Barnard's publications, which had a very wide influence, appeared in its final form—the book entitled "School Architecture, or Contributions to the Improvement of Schoolhouses in the United States." In 1838 he prepared an Essay on School Architecture, as a lecture. This was published in the *Connecticut Common School Journal* for 1841, and submitted as a report on schoolhouses to the Connecticut Legislature in 1842. The joint committee refused to recommend the publication, though it was the "most

* See also *National Education in Europe*, containing not only Barnard's observations in two visits to Europe but also the reports of C. E. Stowe to Ohio in 1837, A. D. Bache to Girard College in 1839, Horace Mann to Massachusetts in 1840, and Joseph Kay to Oxford University in 1850. Of this book the *Westminster Review* for October, 1854, Vol. VI, N. S., p. 568, said that it contained "more valuable information and statistics than can be found in any one volume in the English language," and that it was "the first volume which groups, under one view, the varied experiences of nearly all civilized countries."

thorough, systematic, and practical discussion of the subject yet made." Only through strenuous efforts was the publication secured, and then only on condition that Barnard bear the expense for woodcuts and part of that for printing. Of the various forms of the book, over 100,000 copies were printed, without any pecuniary return to the author. In 1848, Barnard published an enlarged edition of the book, under the title "School Architecture." In this edition he said:

The subject was forced on the attention of the author, in the very outset of his labors in the field of public education. Go where he would, in city or country, he encountered the district schoolhouse standing in disgraceful contrast with every other structure designed for public or domestic use. Its location, construction, furniture, and arrangements seemed intended to hinder and not promote, to defeat and not perfect the work which was to be carried on within and without its walls. The attention of parents and school officers was early and earnestly called to the close connection between a good schoolhouse and a good school and to the great principle that to make an edifice good for school purposes, it should be built for children at school and their teachers, for children differing in age, sex, size, and studies, and therefore requiring different accommodations, for children engaged sometimes in study and sometimes in recitation, for children whose health and success in study require that they shall be frequently and every day in the open air for exercise and recreation and at all times supplied with pure air to breathe, for children who are to occupy it in the hot days of summer and the cold days of winter, and for periods of time in different parts of the day in positions which become wearisome if the seats are not in all respects comfortable and which may affect symmetry of form and length of life, if the construction and relative heights of the seats and desks which they occupy are not properly attended, for children whose manners and morals, whose habits of order, cleanliness, and punctuality, whose temper, love of study, and of the school are in no inconsiderable degree affected by the attractive or repulsive location and appearance, the inexpensive outdoor arrangements and the internal construction of the place where they spend or should spend a large part of the most impressionable part of their lives. This place, too, it should be borne in mind, is to be occupied by a teacher, whose health and daily happiness are affected by most of the various circumstances above alluded to and whose best plans of order, classification, discipline, and recitation may be utterly baffled, or greatly promoted, by the manner in which the schoolhouse may be located, lighted, warmed, ventilated, and seated. With these general views of school architecture, this essay was originally written.

The book was indorsed by the National Convention of Friends of Public Education at Philadelphia in August, 1850, and was republished in its fifth edition in 1854 in a volume containing 464 pages. In this final form the work comprised:⁶ (1) An exposition of errors in building schools; (2) a discussion of purposes and principles to be observed in building them; (3) descriptions of a variety of plans; (4) illustrations of the arrangements of seats and improvements in warming and ventilation; (5) a catalogue of maps, globes, and

⁶ Another work of Barnard's issued about this time was "Hints and Methods for the Use of Teachers," pp. 128.

other means of visible illustration with pieces; (6) a list of books on education and such as are suitable for school libraries; (7) rules for preservation of schoolhouses; (8) examples of exercises suitable for the dedication of schoolhouses.

By 1854, as his successor, J. D. Philbrick, said, Barnard "had done more than any other man to shape the educational policy of the Nation."⁴¹ At the beginning of the next year he resigned his position on account of ill health and in the hope that he might be able to devote all his time and energy to "certain educational undertakings of a national character"—that is, to the publication of the *American Journal of Education*. He was succeeded by his associate principal in the State Normal School. The "long-deferred hopes of a better day for our common schools" were "beginning to be realized and the seed he scattered with a bountiful broadcast hand" was "springing up into an abundant harvest."⁴² In his first report Mr. Philbrick wrote:

I occupy the place that has been filled by one whose eminent abilities, wise counsels, and abundant labors in the cause of popular education have merited and secured the highest respect and confidence of the people of the State. He embarked in this enterprise of beneficence when there were few to encourage and aid and many to discourage and to oppose. He had pioneer work to do. He had to encounter the jealousies of party, the prejudices of ignorance, and the hostilities of a blind, though honest, conservatism, which could see nothing in his plans of improvement but destruction to the old landmarks of the fathers. In retiring he leaves a different state of things. He has enjoyed the satisfaction of witnessing these obstacles gradually melt away before the power of truth, and the friends of progress constantly increase in number and power till his long-cherished hope of seeing Connecticut regain her ancient proud place in the front rank of the educating States seems about to be realized, that blessed day ushered in when every school in the State shall be good enough for the best and cheap enough for the poorest."

At the time of his resignation the *Connecticut Common School Journal* said:

Though scarcely yet arrived at the meridian of manhood, Dr. Barnard has already achieved the labors of a lifetime and has furnished to the world an example of devotion to the cause of popular education in an elevated sphere with which it would be difficult to find a parallel.⁴³

⁴¹ "Henry Barnard, the American Educator," in *Mass. Teacher* for January, 1858.

⁴² 1 *Am. J. Ed.*, 650.

⁴³ *N. S.*, vol. 2, p. 306. On Oct. 23, 1854, Barnard wrote the State Teachers' Association that on account of illness he would not be able to attend the meeting at Norwich. He had resigned his position, but hoped still to work with the teachers and that they would support his successor.

Chapter VII.

THE AMERICAN JOURNAL OF EDUCATION (1855-1860) AND THE CHANCELLORSHIP OF THE UNIVERSITY OF WISCONSIN (1858-1860).

When Barnard retired from his official post in Connecticut in 1855, he set himself to the task of publishing an educational magazine. For this task he was in many respects remarkably well fitted. His wide travel, his comprehensive reading, his extensive acquaintance with scholars were of great value for this purpose, as were his indomitable persistence and superb enthusiasm. He lacked capital, however; was not a good business manager; and, curiously enough, after all his experience with the public, he was no popularizer and did not realize the need of writing readable articles, if a large body of subscribers is to be obtained. Unable to procure a large body of contributors in America, Barnard was forced to rely on his own pen and on reproduction and translation of the writings of other men in foreign lands and foreign languages. The contents, fairly well diversified at first, grew less so and the volumes assumed more of a monographic character, according as some subject was uppermost in Barnard's mind. He was not only editor, but also proprietor of the *American Journal of Education*, whose 31 large octavo volumes, each containing about 800 pages, appeared from 1855 to 1881, at first periodically, and afterwards as Barnard could obtain money or credit from some printer to publish them. On December 26, 1854, in submitting his plan of a central agency for the advancement of education in the United States to the American Association for the Advancement of Education, then meeting at Washington, Barnard included in the scope of his plan the publication of a journal, "embracing accounts of systems, institutions, and methods of education, as well as current educational thought." He followed up this suggestion by sending out a circular upon his own responsibility in May, 1855, stating that he proposed to publish a periodical, to—

embody the matured views and varied experience of wise statesmen, educators, and teachers in perfecting the organization, administration, instruction, and discipline of schools of every grade, through a succession of years, under widely varying circumstances of government, society, and religion, and, on the other hand, expose real deficiencies, excite to prudent and efficient action, and serve as a medium of free and frequent communication between the friends of education in every portion of these great fields.

No. 1 of what was intended to be a quarterly publication appeared in August, 1855. At first, Barnard had planned to publish at least 10 volumes, but when that number had been reached he continued the Journal for 6 more, during the Civil War period. Four more volumes were issued while Barnard was at St. John's College and in Washington, and with his return to Hartford in 1871 he resumed the publication with volume 21 and continued it until 30 had been reached. Then, after Barnard had put into it, as he said, more than \$50,000 of his private fortune, he was forced to discontinue the publication. The subscriptions had never met the cost of the magazine,¹ and in the endeavor to continue its publication his property became involved in mortgages. This result, however, was far in the future, when Barnard issued the prospectus for the first number of his projected quarterly. He planned to include therein the "history, discussion, and statistics of systems, institutions, and methods of education in different countries, with special reference to the condition and wants of our own." He had formed the idea in 1842, on the discontinuance of the Connecticut Common School Journal, and in 1850 had brought his plan unsuccessfully before the American Institute of Instruction at its Northampton meeting. He was now out of office and had failed to secure the interest of the Smithsonian Institution in his plan of a central agency for education; so he felt the way was clear for his own establishment of this magazine, of which the first number was issued in August, 1855. At that time, the Rev. Absalom Peters, D. D., contemplated the publication of the American College Review, and a conference with him led to a combination of the two journals under a joint editorship. Barnard, however, did not work well in double harness, and the two editors fell out in the course of preparing the second number; so Barnard resumed his independent project. He promised to issue 10 volumes of the periodical during the five years and would "avoid the insertion of all topics or papers foreign to the great subject to which it is devoted, or of a single line or word calculated to injure intentionally the feelings of any faithful laborer in any allotment of the great field of American education."

In the first number he published the proceedings of the meeting of the Association for the Advancement of Education at Washington in 1854. He did not intend to limit the field of the journal to the United States. *Res publica literarum est totius mundi* was his maxim and he hoped to construct a work which "would take deep hold on the thoughts of men." In the second number are found articles upon Canadian education, education in Illinois, sketches of F. A. P. Barnard and Denison Olmsted, and upon colleges and educational

¹ Monroe, 24, 28.

intelligence. The third number contains sketches of H. P. Tappan and Tayler Lewis, as well as discussions on methods of teaching Greek and Latin, on moral education, and on public schools in St. Louis. John A. Porter, of Yale, contributed a plan of an agricultural school, and Daniel C. Gilman an article on Scientific Schools in Europe, to this number. Statistics from different parts of the world were also given. The fourth number contained articles upon debating, physical sciences and mathematics, special forms of education (such as of idiots, of the deaf and dumb, and of women), on the consolidation of American colleges, educational biography, and the Massachusetts Normal School. A supplementary number contained a sketch of Barnard himself, with an engraved portrait.¹⁴

The contents of volume 2, which was published in 1857, were fully as varied. Prof. Gilman contributed an article on Higher and Special Schools of Science and Literature in France, and James D. Dana another upon Scientific Schools. An address was published on Home and Parental Influence on public education, which had been read by Barnard before the American Institute of Instruction at Springfield, in August. Articles dealt with the reception to George Peabody at Danvers, Froebel, gradation of schools, Roman Catholic education in the United States, a national university, the gyroscope, the Dudley Observatory at Albany, drawing and art, Norwich University, religious instruction in schools, modern Greek, public libraries, reading, the common school in the United States, Milton's views on education, and Miss C. E. Beecher's opinions on physical training.

The third volume was completed in 1858 and contained articles upon German reform schools for boys, Horace Mann, Roger Ascham, Nicholas Brown, the deaf and dumb, Swiss orphan schools, Pestalozzi, De la Salle and the Christian Brothers, Shenstone's School Mistress, the Kaiserwerth deaconesses, the blind, education in Sardinia, J. W. Gibbs, and on mental science by Haven. Barnard did not draw around him a body of contributors, but wrote, selected, or translated most of the articles himself. Volumes 4 and 5 were published in 1858. In the former we find a treatment of such subjects as college prayers, Pestalozzi, Lowell Mason, John Sturm, art as a branch of popular education, Edmund Dwight, methods of teaching, Laura Bridgeman, Thomas Arnold, William A. Alcott, Erasmus, Melancthon, educational architecture, and Raumer's estimate of Luther. Volume 5 included discussions of ventilation, education in Germany, the Jesuits, Comenius, the Lowell lectures, Franke's orphan-house,

¹⁴ The New York Public Library contains a letter from Barnard, dated May 16, 1856, and written to Rev. Barnes Sears, introducing C. E. Langdon, "a professor . . . of indoor gymnastic exercises," and adding that "his is the only system which I could get interested in and which I could practice by myself."

Rousseau, Basedow, Timothy Dwight, Horace Mann, education in Saxony, and Yale by J. L. Kingsley.

The year 1859 saw volumes 6 and 7 appear, two numbers being included in each volume. The former volume contained contributions upon German universities, the Phillips Academies, common schools in Ohio, Pestalozzi, Von Raumer's estimates of Herder and Locke, Wilbur Fisk, education in Bavaria, James Hillhouse and the Connecticut school fund, Lord Brougham, Latin, and Hill's order of studies. In volume 7 we find Von Raumer's views on German universities, and articles on McGill University, Joshua Bates and the Boston Public Library, Edward Everett, the history of pedagogy, Pestalozzi's assistants and classical instruction.

Volumes 8 and 9 were published in 1860, while Barnard was in Wisconsin. In volume 8, he stated that he had prepared to devote five of the best years of his life to the journal without recompense, but that he found that the regular subscription list would not meet the expense of printing and paper and he had gone forward with a "formidable and increasing deficit." He would still try to complete the 10 volumes planned. In this volume we find educational aphorisms, Von Raumer's views on the teaching of history, geography, natural science, and geometry, Josiah Holbrook and the lyceum, physical education, the public schools of England, education of the factory population, education in Germany, Belgium, Holland, and Norway, school discipline, singing, and agriculture.

In volume 9 are found articles upon moral education, universities, Tübingen, Harvard, elementary education, the catechetical method, architecture, normal schools, education in Scotland, Prussia, Austria, France, and Ireland, and instruction by objects. Volume 10 closed the first series, and in it are found articles upon the Connecticut Normal School, the subject of education, drawing, art and science, Joseph Lancaster and Andrew Bell, Yale, Mary Lyon, and the teaching of economics.

The method of arranging the articles was peculiar. Barnard intended to use a second time the material printed in the Journal, so as to compose books from it, and, to save expense, he had the Journal printed from stereotype plates. Each article was made to begin a new page, so that the plates could be used again without change. Quite a number of such volumes of reprints were published, one of the first of these being one upon "Reformatory Education: Papers on preventive, corrective, and reformatory institutions and agencies in different countries," including both Europe and the United States.² From his earliest connection with the public school system in Connecticut, Barnard had been convinced of the "necessity of establishing

² Published in 1857, p. 361.

special institutions to meet educational deficiencies and counteract causes and tendencies to vice and crime among a large and increasing class of the population in cities and manufacturing districts." To attain this end, he recommended evening schools, libraries, lectures, and museums, reform schools, and home missions. As a result of his lectures and articles, aided by the efforts of many philanthropic persons, reform schools were founded in Connecticut and Rhode Island.

The cyclopedic knowledge and the amazing assiduity of Barnard made the *Journal* possible and it stands as a monument to his power to work.³ It is easy to see, however, why it was not popular. Wide as was its scope, its character was too personal. It contained the articles which Barnard could write and, with all his breadth of knowledge, he could not know everything. The articles were written upon subjects which interested him and in such a manner that he might later use the articles for an ulterior purpose, as parts of a volume, which again was to be a part of a great encyclopedia of education. We are extremely thankful that we possess the *Journal* as a work of reference, but we can easily see from the statement just made why it was not popular as a magazine.

In a sketch written after Barnard's death, the Rev. A. D. Mayo stated that:

From the year 1837 to the day of his death, * * * he was always recognized as among the foremost educators of his own country and especially conspicuous, as for many years the medium by which the history and condition of education in Europe was transmitted to the United States.⁴

This transmission came through the *American Journal of Education*, of which Mayo writes that:

Its collection of useful information, doubly important during the period of the two great revivals of the people's public school, from 1830 to 1850 and from 1870 to the close of the century; its fertility in the details of home schooling, which makes it in many cases the only reliable authority in American educational history, its judicial impartiality in the treatment of all sorts and types of educational institutions, ignoring both sectarian religious and partisan political prejudices, its characteristic spirit of optimistic estimate of educational systems and methods in advance of the time, which in one or another shape have become incorporated with the various school organizations of the country; in these and other ways we note the vast field in which he was most content to abide. * * * His wide acquaintance with the best that was going on in Europe qualified him to publish the results there obtained, with thorough understanding of the conditions under which this information could be accepted and used in the United States.

Outside of the magazine we find little trace of Barnard's activity from 1856 to 1859. In 1857 his friend David Watkinson, of Hartford, died, making Barnard one of the original trustees under his

³ The first edition of *Educational Biography* appeared in 1857, and of *Object Teaching* in 1860.

⁴ Rep. of U. S. Commis. of Ed., 1902, I, 891.

will of the Watkinson Library, at that time one of the largest library endowments in America. The library was organized in 1858, on February 1 of which year Barnard read a memoir of Watkinson before the Connecticut Historical Society. In 1861 Barnard was elected librarian of the Watkinson Library, but for some reason never filled the position. He was present at the meeting of the American Institute of Instruction, held at Springfield, Mass., in August, 1856, and was called on unexpectedly for an address, in which he laid emphasis upon the importance of regular attendance at school. He went so far as to propose that, if any child did not appear at school within the first few days of the session, he should forfeit the privilege of attending the school. He continued by "uttering a heresy" that "the entire expense of the public schools should" not "rest upon the entire community," but that a portion of that expense should "rest upon the parent." The original free schools gave a liberal training, but were not without expense, and men were later misled by a false understanding of the word. Further in his address, he urged the foundation, under private auspices, of free charity industrial schools for the children in the large cities who can not attend the public schools or should not be permitted to mingle with the children there. He would also separate the neglected from the criminal children. He also advocated appropriations in aid of academic education, and the establishment of schools "of a scientific character, to prepare the students for higher engineering, manufacturing, and mechanical pursuits." Libraries should be encouraged, but he believed that, with a small charge for the use of them, better results would be secured, than by making the books free. Appointments to public office should be made after competitive examination, as in England. Women should be taught the use of the needle and domestic economy, and no longer should it be true that children have "too little to do with the household arrangement, with the farm and the garden."

Gov. George S. Boutwell objected to Barnard's proposal to place part of the expense of schools on parents, and Barnard in reply rather confused the issue, by saying that parents had the right to support the private schools.

CHANCELLOR OF UNIVERSITY OF WISCONSIN.

In July, 1858, Barnard was offered the positions of chancellor of the University of Wisconsin and agent of the normal school regents,⁵ with a salary of \$2,500 a year. He accepted the position,

⁵ Carpenter, *Historical Sketch of the University of Wis.*, 33; Butterfield, *History of the Univ. of Wis.*; W. F. Allen and D. E. Spenser's *Higher Ed. in Wis.*, 28; *Circ. of Bureau of Ed.*, 1889, No. 1.

but owing to severe illness did not come to Wisconsin until May, 1859. In June, he met the regents and he was inducted into office at Madison at the Fifth Commencement, on July 27. The day before this he welcomed the State Teachers' Association to the Capitol. He had come to Madison some years previously,⁶ at the invitation of Hon. J. H. Tweedy, to present the subject of popular education to the constitutional convention of the Territory, when it was on the point of becoming a State. His scheme was practically included in the constitution, which was rejected by the people, but was later included again in the constitution of 1848. It seems to have been his own idea to have the university linked with the normal school. Lyman C. Draper, superintendent of education for the State, after Barnard had accepted the position, said in his report:

As a promoter of the cause of education, the career of Dr. Barnard has no precedent and no parallel. We have reason to felicitate ourselves on the acquirement of such a man. It ought to form a new era in our State history, and it will if we are true to ourselves and true to him. We shall best favor ourselves and bless the State by listening confidently to and carrying into effect whatever suggestions and advice such a man as Henry Barnard, with his ripe experience and noble devotion to the good of his race, may deem it his duty to offer on matters pertaining to the great cause of popular education in Wisconsin.⁷

"He comes to us ripe in educational experience and is devoting, with unflagging energy, the best years of his life to the honor and glory of Wisconsin." Like Saul, the son of Kish, he towers above his fellows. Teachers' institutes had already succeeded. The normal school will also "feel the genial influence of his persuasive instruction and the molding power of his zeal, his talents, and his genius." He was expected to deliver educational addresses and conduct teachers' institutes throughout the State and to give a good deal of attention to the normal schools.⁸ He said that, in this way, he reached three-fourths of the teachers of the State.⁹ He secured some able men to conduct the institutes in the fall of 1859,¹⁰ and exercised a general supervision over them, delivering an introductory address upon popular education at most of them. At Beloit, for example, we are told that he "made a stirring and powerful appeal to educators and the educating public to rally to the rescue of the common schools, the foundation and feeders of the college and the university. His remarks exhibited the wisdom and experience of a

⁶ Rep. of Commis. of Ed., 1896-97, p. 800.

⁷ Supt. Barry wrote that Barnard's coming "was the most important event in our educational history, if not indeed the most important, in view of its public consequences, that has ever transpired in the history of the State."

⁸ Letter of Prof. Walter M. Smith, of Mar. 18, 1915.

⁹ Monroe, 20.

¹⁰ He was present at Kenosha, Baraboo, Galesville, Milton, Beloit, Madison, Waupun, Elkhorn, and Appleton, and absent from the institutes held at Sheboygan, Mineral Point, Eau Claire, Richland Center, and River Falls.

lifetime spent in the study of the various institutions of learning."¹¹ At these institutes 1,425 persons were present.

In the same autumn he issued a circular appealing for funds to erect at Madison a building for lectures and experiments to promote science among the whole population. This early advocate of university extension urged—

universal instruction in art and science and their application to health and industry as cardinal objects in the educational system of the State, from the district school to the university, not to the exclusion of languages and mathematics, but on a footing of equality, both as a means of mental training and for the manifold and constant uses in life.

He wished to see: (1) Drawing and physiology taught in every school; (2) the study of the local peculiarities of soil, mineral, animals, and occupations in every town; (3) preparation in all public high schools, academies, and colleges aided by the State and especially in all normal classes for a thorough scientific course in the university or a special polytechnic school; (4) the establishment of a museum of practical science; (5) local museums and annual courses of lectures for all the population in the principal towns.¹²

He had consulted at Detroit before coming to Wisconsin with his predecessor in the chancellorship, Dr. J. H. Lathrop, as to the university. Barnard recommended to the regents that they transfer the preparatory department to the Madison High School, develop the normal department, add practical instruction in the application of science to individual and public health, to agriculture, architecture, and the other industrial pursuits, try to spend less for buildings and more for instruction and put up no more dormitories. He wished the students classified by individual studies and not by group of studies, or period of residence, and that degrees be given after a public examination, without regard to the place where the candidate should have pursued his studies. Recommendations were also made for the beautification of the grounds and for the building of a breakwater on the lake. He republished from the *Journal* four volumes, in editions of over 1,000 copies, that they might be distributed among the teachers.¹³ His intention was to bring about a unity of all educational forces, from the kindergarten to the university; to make the university felt in the educational movement of the State, and develop the university's internal life, so as to meet the needs of the

¹¹ Wis. Jour. of Ed., V.

¹² He outlined his plans to the board of normal school regents on Nov. 22, 1859, and they approved them.

¹³ One of these volumes was thus entitled: *Papers for the teacher*, republished from the *American Journal of Education*, Second Series, 1860, by Henry Barnard, agent of the regents of the normal schools, Madison, Wis., December, 1859, pp. 434. Object teaching and oral lessons on social science and common things, with various illustrations of the principles and practice of primary education, as adopted in the model and training schools of Great Britain and Ireland.

State; to bring up the high schools, so that they might reach the proper standard; to prepare students for the university, rather than reduce the university to a State high school; and to increase the university's resources by obtaining a fund for a polytechnic department from the legislature.

Great expectations had been held of Barnard's coming to Wisconsin, but they were not realized.¹⁴ His health was poor and for considerable periods he could not work. Say Allen and Spencer:

Such effort as he was able to make was put forth in discharge of his duties as agent of the normal school board. The uplifting of the common schools was the object of his special labor and enthusiasm.¹⁵ The university saw little or nothing of him, and suffered greatly in consequence for lack of a guiding and controlling hand.

Carpenter writes that Barnard's connection with the university was—

merely nominal. During the two years that he held the position of chancellor, he never gave a lecture or heard a recitation, and met the students but once in chapel.¹⁶ The connection with normal schools of the State, which had been so strongly urged by the regents of the university, was at last abandoned by the normal board, as the continued absence of Dr. Barnard compelled them to an independent organization.

Early in 1860 he suffered a severe attack of nervous prostration, and left Wisconsin in May. Supt. Pritchard wrote, in his report for 1860,¹⁷ that "Dr. Barnard has given such an impetus to the cause of common-school education and, through" his publications, "has furnished such effective helps to the teachers, as will cause universal regret at the necessity under which he is laid of seeking the restoration" of his health by leaving the State. He resigned his position that summer, but his resignation was not accepted until January 17, 1861. He was detained "at his home" in Hartford by illness, so that he could not preside at the commencement in July, 1860, but even then the Wisconsin Journal of Education¹⁸ was hopeful for his administration, and reported that "We are glad to learn that Chancellor Barnard has signified his intention of removing his family ere long" to Madison, "and devoting himself to the arduous duties of his position. During the past year, though much absent, he has done not a little to elevate the university in the estimation of the people of this State." More money was needed, and Barnard could

¹⁴ Hughes, p. 569.

¹⁵ He had thought of aiding in the higher education of women and in that of the Wisconsin Indians.

¹⁶ It had been distinctly understood, however, when he accepted the chancellorship that he should not engage in the work of instruction. On Nov. 30, 1859, Barnard issued a circular describing the university.

¹⁷ Rep. of U. S. Comms. of Ed., 1860-97, p. 802.

¹⁸ VI, 37. A newspaper controversy followed his resignation, summarized in Wis. J. of Ed., vol. 1, 308.

not obtain it. It was always a cause of regret with Barnard that his health prevented him from directing the young career of the institution which has become a great State university, and he received with great pleasure the greetings the president and faculty of the university sent him on the occasion of his eighty-sixth birthday:

We, who have entered¹⁹ into the fruits of your early work, recall your enthusiastic labors in preparing the way for higher education in this State. Your sagacity early recognized that the foundations of a State university must be laid among the people, and you devoted yourself with contagious zeal to the upbuilding of the school of the Commonwealth.

Surely it was not without reason that J. D. Philbrick wrote in 1858,²⁰ that Barnard had "accepted the whole country as the theater of his operations, without regard to State lines, and, by the extent, variety, and comprehensiveness of his efforts he has earned the title of the American educator."

¹⁹ Norton, p. 127.

²⁰ 4 N. E. Mag., 445.

Chapter VIII.

AUTHORSHIP (1860-1866) AND PRESIDENCY OF ST. JOHN'S COLLEGE, ANNAPOLIS, MD. (1866-67).

Upon his retirement from his work in Wisconsin, Antaeus-like, Barnard returned to his old home in Hartford and devoted himself to the recovery of his health and to the preparation of educational literature, in which tasks he was engaged for six years. In 1862 appeared the eleventh volume of the *American Journal of Education*, or volume one of a new series of that periodical. Its contents were as varied as possible, ranging from abstract questions, such as What is education? to biographical sketches such as those of Mark Hopkins and S. G. Howe. We find discussions of Plutarch, Quintilian, Locke, Spencer, and Guizot, of Vassar, and of Ascham, articles on Ireland, the Polytechnicum in Carlsruhe, and professional education in Prussia, reprints of Hartlib's proposal for an agricultural college in 1651, and of a plan for an industrial school in 1647. Volumes 12 and 13 were published in 1863, and in them we see clearly the *disiecta membra* of the history of pedagogy from the earliest times, which Barnard always intended to write. Much of the two volumes is devoted to the subject of military schools in various countries, which articles were republished in book form.¹ When "the War of Secession" began Samuel Colt was meditating the establishment of a school of mechanical engineering in Hartford. He thought of engrafting military training upon the school, and, after conference with him, Barnard began his investigations. Mr. Colt's death put a stop to the plan, and the only result was the publication of this volume at his widow's expense. Barnard did not object to a moderate amount of drill in schools, but considered this not "an adequate substitute for the severe scientific study which a well-organized system of military institutions provides for the training of officers." He maintained that:

Our old and abiding reliance for industrial progress, social well-being, internal peace, and security from foreign aggression rests on—

1. The better elementary education of the whole people through better homes and better schools—through homes, such as Christianity establishes and recog-

¹ Military schools and courses of instruction in the science and art of war, pp. 948, 1872.

nizes, and schools common, because cheap enough for the poorest and good for the best, made better by a more intelligent public conviction of their necessity and a more general knowledge among adults of the most direct modes of effecting their improvement and by the joint action of more intelligent parents, better qualified teachers, and more faithful school officers. This first great point must be secured by the more vigorous prosecution of all the agencies and measures now employed for the advancement of public schools, and a more general appreciation of the enormous amount of stated ignorance and half education or miseducation which now prevails, even in States where the most attention has been paid to popular education.

2. The establishment of a system of public high schools in every State, far more complete than exists at this time, based on the system of elementary schools into which candidates shall gain admission only after having been found qualified in certain studies by an open examination. The studies of this class of schools should be preparatory, both in literature and science, for what is now the college course and for what is now also the requirement in mathematics in the second year's course at the Military Academy at West Point.

3. A system of special schools, either in connection with existing colleges, or on an independent basis, in which the principles of science shall be taught with special reference to their applications to the arts of peace and war. Foremost in this class should stand a national school of science, organized and conducted on the plan of the Polytechnic School of France and preparatory to special military and naval schools.

4. The appointment in all departments of public service by open competitive examination.

In writing the report of the visitors to the Military Academy at West Point in 1863, Barnard advocated appointment by competitive examination. He also served as a visitor to the Naval Academy at Annapolis in 1864. At the meeting in Concord, N. H., of the American Institute of Instruction in August, 1863, at which he was chosen a vice president, he introduced a resolution that Congress be petitioned to—

revise the terms and mode of admission to the national military and naval schools so that candidates should compete, in open trial, before intelligent and impartial examiners in each State * * *, and that in all cases the order of admission shall be according to the personal merits and fitness of the candidate.

Barnard stated that of 54 young men recently sent to West Point by Members of Congress not more than 10 could enter any high school. He secured a unanimous vote for the passage of the resolutions, although the fear was expressed by one Member that "Members of Congress, elected on political principles, would" not "give up any privilege or perquisite till they were compelled to." On August 12, 1864, at Ogdensburg, N. Y., he addressed the National Teachers' Association along the same line on "Competitive examinations applied to appointments in the public service." In addition to the articles on military and naval schools, volume 12 contained

accounts of benefactors of American education, discussions on moral education and gymnastics, descriptions of the Boston Latin School and of education in Modern Greece, discussions of the teaching of Greek and Latin, and of the old A B C books. In volume 13 we find articles, as usual, upon most diverse subjects: Plays and holidays, What is education? American textbooks, Goldsmith and Samuel Johnson, Herbert Spencer, Fenelon, Wayland, architecture, female education, education in Ireland, normal schools in France and Switzerland.

The fourteenth volume was published in 1864, and contained articles on education in Holland, Russia, Canada, Great Britain, and Denmark; on Aristotle, Rabelais, Milton, Lycurgus, Locke, and Horace Mann; on the English language, the teacher as artist, the National Teachers' Association, physical exercise, architecture, and textbooks.

Volume 15 appeared in 1865, and contained articles on studies and on conduct, architecture, teachers' associations, normal schools, physical culture, endowed grammar schools in England, and education in Connecticut and in Germany.

In volume 16 was published in 1866 an article by Barnard on Educational Associations, written for the National Teachers' Association in August, 1864, but not read then by him on account of illness. The volume also contains articles on St. Paul's School, London; on New England Academies; on Southey's opinions as to teachers from The Doctor; on William of Wykeham and Winchester; on Sarmiento and his educational work for South America; on school apparatus; on education in California, Italy, and Sweden; on St. John's College, of which Barnard was assuming the presidency; on normal schools; and on the nature and value of education. Volume 17 appeared in 1867, and contained reprints of Hoole's works (written about 1650), on the grammar school, master's method, and scholastic discipline. Other articles treated of Cowley, the Westfield Normal School, American ethnology, education in Prussia and Switzerland, Mrs. A. L. Phelps, Egerton Ryerson in Canada, schools as they were in the United States, and the opinions of Fairchild of Oberlin on coeducation of men and women, of Dupanloup on female education, and of Von Sybel on German universities.

From time to time Barnard would assemble the plates of articles upon some subject from the volumes of the Journal and publish them as a book. Thus, in 1860, appeared from volumes 3 and 7 of the Journal, a volume entitled Pestalozzi and Pestalozzianism, containing Von Raumer's life of the educator and a translation of many of his writings, as well as articles on Rousseau, with extracts from Emile and chapters on the influence of Pestalozzi in England,

France, and America.* When Von Raumer received a copy of this book, he wrote from Erlangen to Barnard³ that:

You have collected with the greatest diligence all that relates to Pestalozzi and his school. I can hardly understand how you could have made such a collection, in America or out of it either, even by the aid of well-informed correspondents. * * * It is the most comprehensive, reliable, and satisfactory work I have on the great Swiss educator.

A little before the book on Pestalozzi there had appeared a volume entitled "American Educational Biography, memoirs of teachers, educators, and promoters, and benefactors of education, science, and literature."⁴ This volume was intended as the first of a series "containing sketches of the lives of those who, in different ages and countries and under widely varying circumstances of religion and government, have labored faithfully and successfully in different allotments of the great field of human culture." Only one other volume of the proposed series ever appeared,⁵ "German Educational Reformers, Memoirs of Eminent Teachers and Educators, with contributions to the History of Education in Germany,"⁶ much of the book being translated from the works of Karl von Raumer.

Another series projected and partly carried out, in the form of reprints from the American Journal of Education, comprised three volumes: "American Pedagogy: Education, the School, and the Teacher in American Literature"⁷ contained William Russell's "Intellectual and Moral Education," Hill's "True Order of Study," Wayland's "Mind," and articles upon National and State Aid to Education, Professional or Normal Aims and Methods in Teaching, Mark Hopkins, Fairchild, of Oberlin, Cyrus Pierce, J. S. Hart, and D. P. Page. "English Pedagogy,"⁸ contained a wonderful *olla podrida*: Reprints of Ascham's "Schoolmaster," Bacon's Essays on Custom, Education, and Studies, Wootton's Apothegms, Milton's Tractate on Education, Hartlib on an Agricultural College, Locke's Thoughts on Education, Herbert Spencer on Education, Petty on a Trade School, Fuller's Good Schoolmaster, Goldsmith's Deserted Village, Shenstone's Village Schoolmaster, Cowper's Tirocinium, Crabbe's School of the Borough, Hood's Irish Teacher, etc. "Ger-

* A second edition, entitled "Pestalozzi and his educational system," was later published by C. W. Bardeen, pp. 751. This volume contains as a frontispiece a portrait of Barnard in middle life and, at page 16, one of him in old age. Bardeen stated that "no man did more to make the work of Pestalozzi known in America than Dr. Barnard."

³ Second ed., p. 128. Barnard worked on this book until 1881.

⁴ With 26 steel portraits. 1859, pp. 526. Second edition republished by Bardeen, with portrait of Barnard in middle life as frontispiece.

⁵ Most of the sketches in the American volume were written by Barnard.

⁶ Published in 1863. Reprint from Am. J. Ed., revised ed., 1878, under title "German Teachers and Educators," pp. 694.

⁷ Second edition, 1876, pp. 510.

⁸ Second edition, 1876, pp. 482. A second series appeared in 1873, pp. 028.

man Pedagogy”⁹ was the third volume and contained chiefly translations from Von Raumer, Wimmer, and Diesterweg.

Another projected series, of which only the first volume was published, was to be entitled “Educational Aphorisms and Suggestions Ancient and Modern.”¹⁰ The portion published was largely a translation of J. F. T. Wohlfarth’s “Pedagogical Treasure Basket,” and in its pages many interesting quotations are to be found.

The voluminousness of Barnard’s literary production was remarkable, for several single volumes are yet to be added to the list of those published during these years. “True Student Life, Letters, Essays, and thoughts on studies and conduct, addressed to young persons by men eminent in literature and affairs”¹¹ was one of these. The preface to the second edition, dated 1872, thus describes the work:

Although these chapters do not cover the whole field of youthful culture or all the aids, motives, and dangers of a scholarly and public career and include a few sheaves only from the golden harvest of recent American didactic and pedagogical literature, they constitute a convenient and valuable manual of student life. The light which they shed, like that which Virtue cast on the diverging paths of Hercules, neither leads to bewilder or dazzles to blind, and the advice which they drop is kindred to that which Wisdom of old uttereth in the street, apples of gold, the words of the wise.

The book is divided into four parts. The first contains aphorisms, answering the question what is education, Masson’s “College Education and Self-Education,” and John Lalor’s “Nature and Value of Education.” In the second part are found extracts upon books and reading, travel, manners, money—its acquisition and management—the conduct of life, methods of study, etc. The third section treats of the education and employment of women, with extracts from St. Jerome, Von Raumer, Thomas More, Mrs. Jameson, and Dupanloup. English pedagogy of the nineteenth century is the theme of the last section.

A more important work is “Kindergarten and Child Culture Papers: Papers on Froebel’s Kindergarten, with suggestions on the principles and methods of child culture in different countries.”¹² In the preface of a late edition of this pioneer work, dated 1879, Barnard wrote:

⁹ Second edition, 1876. The first edition was an enlargement of one of the papers for teachers published while Barnard was in Wisconsin.

¹⁰ Part 1, 1861, pp. 202.

¹¹ Second edition, 1873, pp. 552. Reprint, of course, from Am. J. Ed. Second edition ends with pages (pp. 416 and ff) from recent English publications on the relative value of classical and scientific studies in a liberal education, which pages belonged properly to the second series of papers on English pedagogy.

¹² This work, began as an article in the Am. J. Ed. for September, 1856, was then published as a pamphlet, said to be the first separate one on the subject in the United States, was enlarged in 1858, 1861, and 1867, and was largely embodied in “German Pedagogy.” In its last edition of 1884 it contains pp. 800, of course all reprinted from Am. J. Ed. plates.

A variety of genius must be at work to obtain the teachers of each grade (and the kindergartners with the rest) for their special duties and to instruct and interest parents in the work of the schoolroom and to give them, as such, a direct right of inspection and suggestion as to the schools where their children are in attendance. I believe that parents, as such, have more rights and rights which should be respected by their own direct representatives in all educational boards than are now conceded to them in State and municipal school organizations.

All schools not under progressive teachers and not subjected to frequent, intelligent, and independent supervision are sure to fall into dull mechanical routine; and the kindergarten, of all other educational agencies, requires a tender, thoughtful, practical woman, more than a vivacious and even regularly educated girl. The power of influencing and interesting mothers in their home work and securing their willing cooperation is an essential qualification of the kindergartner. The selection of such can not be safely left to school officers as now appointed and who too often do not look beyond their neighbor's nephews and nieces for candidates. Until the principles of early child culture are better understood and school officers and teachers are more thoroughly trained in the best methods, the first establishment of kindergartens had better be left to those who are already sufficiently interested to make some sacrifice of time or means in their behalf, and when found in successful operation and conforming to certain requirements they should be entitled to aid from public funds in proportion to attendance, and for such aid be subject to official inspection.

The book is a very composite character and is divided into five parts. The first 130 pages are chiefly occupied by extracts from Froebel's writings. A discussion of his educational system follows to page 368. From that point to page 450 we find reprints of early elementary books, such as the *New England Primer* and the *Petty Schoole*, by C. H., printed in 1659. The next 300 pages are devoted to a description of kindergarten work in different countries, and the concluding portion of the volume is occupied by plans of kindergarten buildings, description of the gifts, etc.

In March, 1860, Barnard was appointed as census clerk to prepare statistics of education. By the beginning of 1863 he had received \$2,500 and had made no report. J. C. G. Kennedy, superintendent of the census, then wrote asking that the report be made soon. On May 11 Barnard replied that President Woolsey, of Yale, and many other educators were interested in the matter and that he had devoted his time to the "preliminary work of gathering and preparing materials for the history of education" and asked for more time. I have no more information as to the work.

In 1861 he made a vain application to Lincoln to be sent abroad in the Diplomatic Service, preferably to Switzerland, and in 1862 he withdrew from a candidacy for a regentship in the Smithsonian Institution, as he was opposed by Henry, an opposition Barnard believed occasioned by his desire to have education included within the purview of that institution. During the Civil War Barnard

also found time to deliver a course of lectures, in October, 1863, before the Lowell Institute in Boston on "Books and Education in the United States."

PRESIDENT OF ST. JOHN'S COLLEGE, ANNAPOLIS.

At the close of the Civil War the board of visitors of St. John's College, Annapolis, Md., determined to reopen its doors, which had been closed to students while the buildings had been used for hospitals during several years. In some way their attention was drawn to the fact that Barnard was unoccupied except for his literary labors and they offered to him the presidency of the college. I have always suspected that the Rev. Libertus van Bokkelen, then State superintendent, was responsible for this selection, but have no evidence of it. Through the influence of the late Joseph M. Cushing, a delegate from Baltimore City to the State constitutional convention of 1864, an educational article had been placed in the constitution which was then drafted. Dr. van Bokkelen had begun the establishment of a State school system with great energy and had the idea of capping the educational pyramid by a State university.^{12a} Is it not likely that he may have fired Barnard's imagination by the dream of becoming the president of such a university and so directing the educational interests of the whole State?

On November 11, 1865, Barnard, in response to a letter requesting him to suggest some one for the presidency of St. John's named Prof. Chauvenet, and stated that he thought that a "State college should be in organic connection as well as in instructional sequence * * * with the other parts of the State system of public instruction." On December 1, less than a month later, Hon. Alexander Randall, on behalf of the visitors, asked Barnard to accept the presidency with a salary of \$3,000 and to visit him before making a decision as to the proposal. The election had been made on No-

^{12a} Steiner's *Education in Md.*, p. 143. Barnard's interest in Maryland matters first appears in a letter found in the correspondence of the Hon. Augustus W. Bradford, among the State Executive Papers, which letter reads as follows:

HARTFORD, CONN.,
Nov. 5th, '65.

HIS EX. GOV. BRADFORD,
Annapolis, Md.

SIR: At the request of my friend and classmate, Rev. Mr. Jas. R. Davenport, I shall mail to you several documents relating to the school system of Connecticut.

The one personal to myself is sent not for anything personal but simply because it shows the difficulties which those of us who labored in this field a quarter of a century ago had to contend with, and which you should try to obviate in advance in whatever you attempt in Maryland.

I was consulted a few weeks ago about a bill for an act relating to public schools in West Virginia. The act if adopted as reported by the committee is very good, if wisely administered.

I shall be very glad to hear that Maryland has adopted a liberal system of public education.

Very respectfully, your obt.,

HENRY BARNARD.

vember 30, at a largely attended meeting of the board of visitors, at which Gov. Swann and all the judges had been present, and 16 out of 19 votes cast had been in Barnard's favor, as Thomas Karney wrote him. Barnard thought of the establishment of a scientific school in Baltimore and a pedagogical school in Annapolis, both in organic connection with St. John's, and took the matter under careful consideration. We have no record of the considerations which influenced him, but at any rate Barnard accepted the position and was inaugurated on January 7, 1866, in the hall of the house of delegates in the Statehouse. Gov. Swann, Lieut. Gov. C. C. Cox, Rev. Dr. van Bokkelen, and Hon. William H. Tuck spoke.

Barnard, in his inaugural, referred to the college's famous old poplar tree, to the need of a high school in Annapolis, and of more equipment for the college, while he felt that there was the possibility of establishing there within three years an undenominational college which should be unsurpassed south of Princeton. Emphasis should be placed on pedagogical methods. Every one must instruct at some time, therefore every one should learn methods of instruction. He prepared an elaborate report, dated June 28, 1866, upon the reorganization of the college.¹³ In view of the meager financial resources of the institution, the extent of the plans seems almost grotesque. He hoped to build a gymnasium and a boat and bath house, new laboratories, and an additional dormitory and buy new books for the insufficiently stocked library. He wished to emphasize the teaching of English and of modern languages and thought that efforts should be made to induce more business men to go to college. The curriculum should be divided into 11 departments: (1) Principles of education and religion, with their "applications to methods of study, formation of character, and conduct of life," including ethics, metaphysics, and logic. (He wished to have the State teachers' association meet with the college and to "open to public school teachers of the State any of our courses of instruction, connected with their own instruction, free of tuition, and to arrange the time for the lectures in the history, principles, and methods of education, so as to facilitate their attendance.")¹⁴ (2) Physical culture, the students being placed also in a military organization. (3) English. (4) Mathematics, Physics, and Astronomy, each subject to be taught by a separate professor, as soon as possible. (5) Chemistry and Chemical Technology. (6) Natural Science, comprising botany, mineralogy, geology, and zoology, to be later extended to cover agriculture, mining, and arts. (7) Geography, history, and national industries. (8) Law and public economy. (9) Graphics, drawing, penmanship, and bookkeeping. (10) Fine arts, including music, vocal culture, modeling, and sketching. (The history and princi-

¹³ 16 Am. J. Ed., 539.

¹⁴ Monroe, p. 21.

ples of sculpture, painting, architecture, and landscape gardening should be studied by those who seek the highest honors.) (11) Languages, ancient and modern. To begin work Barnard wished to employ at least five professors and to use nonresident lecturers. He wished a preparatory department and thought that a college is "an extension and perfection of the discipline and attainment of the academy or the high school." His plan discussed terms, tuition, scholarships, and a permanent endowment, as well as the organization of an alumni society.

On August 13, 1866, a circular was issued, signed by Gov. Swann, as president ex officio of the board of visitors. From it we learn that the faculty was composed of Dr. Barnard as principal and professor of mental, moral, and social science, including the principles and methods of education; Rev. G. W. McPhail, D. D., ———; George W. Atherton, Latin; E. P. Scammon, mathematics; Hiram Corson, English; Julius W. Dashiell, Greek; Wm. Steffen, German; D. N. Camp, principal of the preparatory and normal department; Z. Richards, principal of the commercial department; Rev. W. L. Gage, physical geography; S. S. Halderman, chemistry and natural philosophy; and Wm. H. Hopkins, tutor in mathematics and Greek.

In September, work was begun¹⁵ with a preparatory department and a freshman class. Barnard traveled somewhat over the State in the interest of the college but was soon disillusioned of his hope to establish a strong institution. His endeavors to secure contributions for scholarships and for the library were without much result. The legislature had a democratic majority, unfriendly to the Republican board of visitors which had called Barnard. There was danger that the legislative grant to the St. John's would be withdrawn. The house of delegates, on February 7, 1867, asked for information as to the management of the college, and on March 4 J. T. Mason, the secretary of the board of visitors, answered that Barnard had visited many parts of the State, hoped to add by gift 2,500 volumes to the college library and was sanguine of success, if encouraged by the State. Just while matters were in so discouraging a condition, Barnard was appointed United States Commissioner of Education and resigned the presidency of St. John's.¹⁶ The only survivor of the faculty of the college at the time of Barnard's presidency is Prof. William H. Hopkins, of Goucher College, who, under date of March 6, 1915, gave the following reminiscences of this administration:

These were all strangers to us—northerners—I being the only Marylander invited to resume the work I had been compelled to drop by the war, which had forced the college to close its doors. * * * It was the reorganization of an

¹⁵ Steiner, Ed. in Md., p. 118.

¹⁶ While in Maryland he had a conversation with Johns Hopkins. His experience made him feel that the "provincial colleges must be subject to Baltimore."

old southern college in a new political atmosphere. "Rebellion" had just been crushed, and for the time being at least, "loyal," that is to say "Republican," elements were venturing to assert themselves in an environment normally democratic. They had asserted themselves even in the board of visitors and governors of St. John's, temporarily, and so, some of the most influential members of that body, men of the highest character, such as Hon. Alexander Randall, ex-Gov. Pratt, Frank H. Stockett, Dr. John Ridout, and others presumably used their influence to secure the appointment of Dr. Barnard as president. Just how they fixed on him I do not know. Good work was done during that one year by the men whom the new president called to his aid, but the professor himself never met the students in the rôle of instructor. He made, as I now recall it, a few public addresses, sometimes apologizing for very evident signs of hasty preparation, and finding fault with the lack of enthusiastic cooperation on the part of the citizens of our "grand (but rather slow) old Commonwealth." If I may give you my honest impression (of course I may be wrong), I always felt that Dr. B's heart was not wholly in the work of rehabilitating St. John's, or, if it was, that he was clear-sighted enough to "discern the signs of the times" as unfavorable to his further endeavors in that direction.

Well, the new régime was short-lived. Dr. Barnard received the appointment as Commissioner of Education and bade us a prompt and cheerful adieu, amid the usual resolutions, and with him went also his two lieutenants, Messrs. Atherton and Camp, and shortly afterwards Prof. Steffen also departed. In fact, the very next year (1867) saw Dr. James C. Welling, president, and Profs. Nelson, Dashiell, Corson, and others inaugurating a new dynasty and a new period in the life of the old college.

Dr. Henry Barnard was president of St. John's College for only one year (1866-67). During that short time I was so busy with my own work and Dr. Barnard so engrossed, not only with his new duties as president but much more so (as it always seemed to me) with outside matters, his *Journal of Education* in particular, that it can scarcely be said that I came to know him at all. Indeed, his presidency of St. John's I always regarded as substantially without influence on its history. It was but a brief episode in his own busy life, and, I fancy, a convenient stepping-stone to the higher national position on which his eye, it is likely, was already fixed. It is true that he called to the various chairs of instruction some able men. His chief officer, who relieved him absolutely of all executive details, was George W. Atherton, afterwards president of Pennsylvania State College (who died a few years ago in that office).

Prof. Atherton also took charge of the higher Latin and Greek. His superintendent of the preparatory department was David N. Camp, a splendid teacher, the author of *Camp's Geographies*. Then there was William Steffen, an ex-captain of the Prussian Army, who taught mathematics and German and military tactics and athletics, besides acting temporarily as professor of physical science, an able, progressive, but *touchy* Teuton. Dr. Barnard also engaged the services of two nonresident "occasional" lecturers, S. S. Halldeman and Rev. William L. Gage, prominent and able men, whose visits, however, were too few and far between to count as a weighty factor in the college schema.

Chapter IX.

UNITED STATES COMMISSIONER OF EDUCATION (1867-1870).

When the Rev. Samuel Knox, of Fredericktown, Md., that forgotten educational dreamer to whom Jefferson owed so much, went to Washington in March, 1826, to talk with public men concerning his "improved plan of public education"¹ he was met with the universal opinion of Members of Congress that "public education was a subject Congress could not take up; it was unconstitutional and reserved as an inherent right in each particular State." A series of similar defeats met Barnard during his efforts for nearly 30 years.

In 1838 he visited Washington to ascertain what school statistics existed there, and finding that nothing had been done to collect them, after interviews with Mr. Forsyth, Secretary of State, and Mr. Hunter, the chief clerk of that department which had the charge of the census, he brought to the attention of President Van Buren² the desirability of including educational statistics in the census of 1840. These statistics were secured and constituted the earliest recognition of education by the Federal Government. Barnard and Mann used these statistics in 1842 to show the magnitude of the educational interest and the "utter inadequacy of existing means of popular education to meet the exigencies of a republican government." When traveling in that and the succeeding year, Barnard had urged in his addresses the importance of collecting and disseminating reliable information as to schools and of establishing in each State and for the whole country a "central repository or office supplied with plans of schoolhouses, apparatus and furniture, and a circulating library of books and pamphlets on education and a specimen of a school library."

In 1845 and 1847 he tried to have the "diffusion of a knowledge of the science and art of education and the organization and administration of systems of public schools" put into the scheme for the

¹ Steiner's *Life of Knox*, in *Rep. of U. S. Commis. of Ed.*, 1898-99, p. 599.

² 30 *Am. J. Ed.*, 193; *Rep. of Commis. of Ed.*, 1902, I, 893.

Smithsonian Institution. He proposed in 1849, when a member of a committee to present topics to a convention of friends of popular education, that there be established at Washington a "permanent statistical bureau charged with the decennial census, which should present an annual report on the educational statistics and progress of the country." A year later he proposed to secure the same object for New England through the American Institute of Instruction. In December, 1854, he submitted to the Association for the Advancement of Education a "plan of a central agency for the advancement of education in the United States by the Smithsonian Institution or a bureau in a Government department." Bishop Alonzo Potter and Barnard were appointed as a committee to confer with President Pierce thereupon. In 1856 the Association for the Advancement of Education met in Detroit, and Barnard in his presidential address dwelt upon: (1) The magnitude of the educational interests of the country as shown by the census of 1850; (2) the service which the National Government could render by publishing an annual report from a competent officer, who should be put in immediate communication with State and municipal systems and thus should deal with education as another officer dealt with agriculture; (3) the proposed appropriation of the income from public lands to the States for education and the support of public-school teachers; (4) the insertion of a provision in each State constitution making it obligatory for the legislature to establish, aid, and supervise schools and protect society by compulsion from the neglect of parental duty; (5) the application of an educational test to all candidates for Government service. In this last point Barnard showed himself an early advocate of civil-service reform. Every year thereafter until 1861 Barnard visited Washington to secure some advance in these directions.³

The Civil War, with the withdrawal of the State's rights southerners and with the great increase in the centripetal forces and in the powers of the National Government, led to a revival of the plan to have the United States take some part in education. On August 18, 1864, A. J. Rickoff delivered an address at Harrisburg, Pa., before the National Teachers' Association advocating a National Bureau of Education to obtain and communicate information, and saying that:⁴

The Government must recognize the cause of general education as a part of its care, not by direct encouragement alone but, so far as may be, by influences of every kind which can induce a people to regard the matters that concern it as of the highest interest. A Department of Education must be established alongside of the Department of Agriculture.

³ He secured some votes in Congress for the agricultural land-grant bill.

⁴ 16 Am. J. Ed., 299.

At the same time⁶ S. H. White spoke in favor of a "National Bureau of Educational Statistics," since "this Nation, founded upon the mental culture of the people and dependent for its prosperity upon their intelligent action, can most completely secure its success by giving to educational agencies the power and influence of national adoption." A year and a half later, on February 7, 1866, E. E. White, commissioner of the common schools of Ohio, read a paper on a National Bureau of Education before the meeting at Washington of the National Association of School Superintendents.⁶ He maintained that "universal education, next to universal liberty, is a matter of deep national concern," and that "education must be coextensive with society." The United States might, by "conditional appropriations and by a system of general inspection and encouragement, through the agency of a National Bureau of Education, induce each State to maintain an efficient school system." A demand existed for a "national channel of communication between the school systems of the different States."

As a result of this address, a memorial was presented to Congress by the association.⁷ Ignatius Donnelly, of Minnesota, also introduced a resolution into the House of Representatives, instructing the joint committee on reconstruction to inquire into the expediency of establishing a National Bureau of Education, "to enforce education without regard to color." The preamble to the resolution, which passed the House by a large majority, stated that such a bureau was necessary, because "republican interests can find permanent safety only upon the basis of the universal intelligence of the people," and because "the great disasters which have afflicted the Nation and desolated one-half its territory are traceable, in a great degree, to the absence of common schools and general education among the people of the lately rebellious States." A bill was next introduced, on February 14, by James A. Garfield, and was referred to a select committee of which Garfield was chairman. The original bill provided for a bureau in the Department of the Interior, but when a report was made on June 5, 1866, the bill had been amended so as to establish the Department of Education. Supported by Donnelly, Garfield, Moulton of Illinois, Banks, and Boutwell, and opposed by Pike of Maine, Rogers of New Jersey, and Randall of Pennsylvania, the bill passed the House on June 19. Garfield's speech,⁸ delivered more vitally affects the future of this Nation than the one under consideration. According to the census of 1860, there were 1,200,000 on June 8, was an elaborate and polished address, replete with information. He knew of no measure "that has a nobler object or that free white illiterate adults in the United States, of whom two-thirds

⁶ 15 Am. J. Ed., 180.

⁶ 16 Am. J. Ed., 177.

⁷ Barnes, History of 39th Congress, p. 553.

⁸ 17 Am. J. Ed., 49.

were American born. The Library of Congress had no educational reports from 19 States. These facts showed the need. The object was no more unconstitutional than others to which Congress had appropriated money; such as the coast survey, the astronomical observatory, the lighthouse board, the exploring expeditions, the survey of a route for a Pacific railway, the Patent Office, or the Agricultural Department. He referred to the advocacy Thaddeus Stevens had given to Pennsylvania schools and praised the interest taken in education by Ohio. Then he quoted the leaders of education in other countries, referred to the work done by them, and closed with an "appeal to those who care more for the future safety and glory of this Nation than for any mere temporary advantage, to aid in giving to education the public recognition and active support of the Federal Government."⁹

On February 26, 1867, the bill was reported favorably in the Senate, and the discussion upon it was opened by Lyman Trumbull with a speech favoring it. Dixon, of Connecticut, Sumner, Howe, Norton, and Yates spoke in favor of it, while Davis opposed it altogether, and Conness and Howard opposed the use of the word *department* (which had been chosen in order that the commissioner might select his own clerks) on the ground that the head of a department should be in the President's cabinet, and that *bureau* would be the better word here. The bill was passed by the Senate without a division on February 28, and on March 1 a motion to reconsider the matter failed by a vote of 7 to 28, 17 Members being absent and no party lines being drawn in the vote. The bill was signed by President Johnson on March 2, and the name of Henry Barnard was sent to the Senate as that of the first commissioner on March 11. The bill¹⁰ provided for a commissioner with a salary of \$4,000, a chief clerk, and two other clerks, all three appointed by the commissioner. Annual reports were to be made, and the subject of land grants for education should be treated in the first report. The commissioner of public buildings was directed to find rooms for the department. The purpose of the department was the collection of statistics and facts to show the condition and progress of education in the States and Territories, and the diffusion of information concerning the organization and management of schools and school systems and methods of teaching, so as to aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise in the promotion of the cause of education throughout the country. In Mayo's words:¹¹

There was one man in the United States who was peculiarly adapted to this grand work of public inspiration in a decisive and inviting way. That man

⁹ Text of the bill is given in 17 Am. J. Ed., 63. Vide also 30 Am. J. Ed., 198 et seq.

¹⁰ Laws of 39th Congress, Ch. CLVIII (H. R., 276).

¹¹ Rep. of U. S. Commis. of Ed., 1902, I, 899.

* * * was the educator who, in a career of 30 years, had achieved a national and international reputation by the habit of fashioning everything connected with education into a grand and attractive shape.

To further education in these ways of collecting and diffusing information had been Barnard's work. He had been consulted by those having charge of the memorial which was presented to Congress,¹² and, at his request and through personal friendship with him, Senator Dixon, of Connecticut, explained to Senators the probability of Barnard's appointment so as to secure favorable consideration of the bill from those who did not favor giving President Johnson an appointive power. Dixon also prevented Johnson from vetoing¹³ the bill by explaining to him that the "true and obvious intent of the bill was not to centralize the administration of schools," but "to perform the work every year which the census undertakes to do every 10 years."¹⁴ In the month in which he was appointed Barnard issued volume 17 of the *American Journal of Education*, with a preface, dated at Annapolis, in which preface he wrote of his recent appointment:

A realization, in a most unexpected way, of his own plan of a central agency for the advancement of education in the United States, first projected in rude outline in a statement submitted to the Secretary of State and the President at Washington in 1838, and again in 1839 in connection with the census of 1840 (by which for the first time any official statistics of children and school attendance for the entire country was obtained), and more fully developed in his communication to the American Association for the Advancement of Education and to the Secretary of the Smithsonian Institution in 1854.

In the reports to be issued by the department he hoped to give information more adequately than had been done in the magazine, which latter would not only contain those reports in future, but also "other discussions" of educational topics. He hoped that some individual or association would take up the magazine while he engaged in the national work, relying on the material already collected by him.

The organization of a new department to advance an interest so delicate and extensive, and so important as the education of the people, without authority to originate or administer any system, institution, or agency by which the education of a single person is secured and with means and clerical force so utterly inadequate to even inaugurate an efficient system of inquiry and dissemination, will engross all the energy and time of the commissioner.

Three months later, from Washington, he wrote on June 8, that:

Constant pressure of engagements connected with his withdrawal from the presidency of St. John's and with the organization of the Department of Edu-

¹² 30 Am. J. Ed., 197.

¹³ Garfield had telegraphed Annapolis to Barnard: "Come over and attend to bill. It is going to be vetoed." (Vide Lectures of 54th Meeting of Institute of Instruction, p. 115.) Barnard came to Washington and asked Dixon to intercede with Johnson for the bill.

¹⁴ N. E. A. Proc., 1901, p. 412.

cation had prevented the issue of the numbers of the Journal for March or June, but that he had now secured Prof. D. N. Camp, as publisher and proprietor of the Journal, while Barnard would generally direct its policy. The monthly circulars of the Department of Education would be sent each subscriber to the Journal.¹⁵

Before the close of the year Camp withdrew and Barnard announced that the magazine would be continued by embodying therein the official documents of the Commissioner of Education.¹⁶

During the first year of Barnard's incumbency of his office Prof. William C. Fowler, of Amherst, wrote him in December on the clergy and popular education,¹⁷ and addressed him as "a distinguished friend and advocate of popular education who has labored long and successfully in Connecticut and elsewhere, first as a pioneer and then as a victorious soldier in this good cause" of education.

Upon his appointment, Barnard at once addressed a circular to the governors of the various States, asking for information as to land grants for educational purposes,¹⁸ and, in his first circular of information, made a report on the educational land policy of the United States. That circular also contained articles on the recognition of education as a national institution, on George Washington and the National University, education in Germany, constitutional provisions concerning schools and education, and Hoole's Petty School. Twelve such circulars¹⁹ were issued in the next year, treating also of the professional training of teachers, school architecture, coeducation, taxation for public schools, agricultural colleges, New England academies, etc. When the American Institute of Instruction met at Boston in August, 1867, Barnard was present and was called upon to give a "general idea of the department and of its work." He told the story of the passage of the bill to establish the department and called attention to the fact that "it does not recognize any intention on the part of the Government to create a system of national education; nothing of the kind was contemplated." He intended to "collect and disseminate information," and told how widespread had been the localities from which requests for that information had come. He also spoke of the reports which he was preparing and added:

I have no prejudices of my own to impose on the country. It has been my aim to bring to bear the light of past and present experience. My belief is that any thing worth preserving has its roots in the past, and to make us grow we need all the light which can be brought to bear from every country.

¹⁵ Vide also 30 Am. J. Ed., 318.

¹⁶ The 18th volume of the American Journal of Education was the American Year Book for 1869, the 19th volume was the Report on Education in the District of Columbia, and the 20th, issued in 1870, was the report on Public Instruction in Different Countries.

¹⁷ 17 Am. J. Ed., 211.

¹⁸ 17 Am. J. Ed., 64.

¹⁹ Reprinted in 30 Am. J. Ed., pp. 833.

At the close of the speech, the meeting unanimously adopted a resolution thanking him and commending the establishment of the department.

On March 15, 1868, Barnard wrote his first annual report.²⁰ He referred to the magnitude of his task in comparing the statistics of the schools of the principal American cities with those of the District of Columbia, and stated that he had prepared schedules to obtain information, had sought to gain it in several modes and had an extended plan of publication to disseminate this information, of which the circulars issued were samples. Recommendations followed: (1) That there be continued prosecution of investigations already begun; (2) that authority be given the commissioner to publish documents called for in the establishment of public schools in States where they did not exist, and to visit, in person or by representative, such States, as well as to attend educational conventions in other States; (3) that, as the commissioner is already overworked, in order not to delay the bureau's work, another clerk be appointed; and that (4) an allowance be made for expenses for the printing, books and incidentals, and for obtaining information from foreign countries, as well as for the salary of a messenger and for the care of the bureau's rooms, which had not been specified in the appropriation of the previous year, and consequently had been disallowed in the settlement of accounts. Barnard had himself borne some of these expenses during the past year. The report, submitted on June 2, met with no favorable reception, for, on July 20, 1868, a bill was signed abolishing the *Department* of Education and creating in its place an *Office* of Education, attached to the Department of the Interior, and reducing Barnard's salary to \$3,000 a year. A year later the title was changed to the *Bureau* of Education, a name which it still retains.

In August, 1868, the American Institute of Instruction, meeting at Pittsfield, Mass., adopted resolutions, stating that it regarded the "establishment of a national department of education as of the highest importance"; regarded Barnard as "eminently fitted to organize and conduct the affairs of this department, both by his previous pursuits and possession of a large library of educational statistics and his general acquaintance with educational interests," and that it would memorialize Congress for the "continuance of this department."

Barnard was present at that meeting and opened the discussion on "Defects in our present system of education." He felt that the greatest lack was in not having in the schools of any State a "course of instruction," on a "broad and comprehensive plan," so as to give

²⁰ 30 Am. J. Ed., 201. Ex. Doc. 299, 40th Cong., 2d sess.

"liberal culture." A great part of our school population was outside of the schools, even in our cities, and no compulsion caused regularity in attendance. We had no "secondary schools that occupy a position corresponding to the German gymnasia or the lyceums of France, by which the foundations are laid deeper and stronger and the edifice is carried higher, so that an effective preparation is made for the superior education which should follow." "In our private academies and secondary schools there is no general supervision. Compulsory education laws should be passed. If a parent will not send a child to school, he should not be permitted to exercise the privileges of a citizen." Great advance has been made in a quarter of a century in the liberality with which schools are supported and in the salaries paid to teachers; but teaching was not yet sufficiently recognized as a profession, nor the advice of teachers sought in all matters that relate to schools. Teachers should put a "check on the admission of unworthy members" to the profession and the "certificate, by which a teacher enters a school, should be given by the teachers as a body." The discussion of defects should not be limited to those of elementary schools, but should also consider those of secondary schools and colleges.

Barnard had turned his attention to the preparation of a Report on Public Instruction in the District of Columbia under a congressional resolve of March 29, 1867.²¹ He compared conditions there with those in other American and European cities and recommended a new organization, in his report of January 19, 1870. After a discussion of the territory, population, and resources, the history and conditions of schools in the District, he proposed the establishment of a Board of Control, of 18 members, appointed for three years, one-third retiring from office each year. Of this board, one-fifth should be appointed by the President and one-fifth elected by the taxpayers and voters in the District. The mayor and treasurer of the municipal corporation within the District should be ex officio members, the teachers' association should elect one or more delegates, the board of health should have a representative, as should special institutions of science and literature, while one or more should represent parents and guardians. Of course, this was a hopelessly complex and unworkable plan. There were to be three other boards. The Board of Instruction was to be composed of all teachers, appointed at first provisionally, after presentation of testimonials and passage of examinations. Permanent appointment should come when additional evidence of success in teaching was shown. No teacher should be dismissed except upon a written recommendation of the inspector general. A life assurance plan should be adopted for teachers. The

²¹ 30 Am. J. Ed., 241.

Board of Inspection should consist of the secretary of the board of control, the inspector general, the special inspectors, etc. The Board of School Visitors should consist of two for each school, who should visit that school every month, and should be elected by the parents and guardians of the scholars yearly. Under these boards the schools should be organized as follows: (1) Primary, intended for children from 3 to 8 years old; (2) intermediate, from 8 to 12 years old; (3) secondary, from 12 to 16 years old; (4) superior, or special, to carry students to the end of the sophomore year in the college course and prepare them for teaching, business, trades, and design, or admission to national special schools, in which schools special emphasis should be placed in teaching the languages of countries with which we have commercial and diplomatic relations; (5) supplementary schools and agencies, with lectures. In the curriculum Barnard would have included music and drawing, physical development, moral and mental philosophy, political and geographical studies, at least one language, mathematics, natural science, and the English language and literature. It is interesting to find that his study of the record of the schools for negroes led him to write that it was "so complete a vindication of their willingness to be taught and ability to profit by the best and highest instruction."²²

While commissioner, Barnard also prepared, in pursuance of a call made upon him by the House of Representatives on January 19, 1870, an extensive report entitled "National Education, Science and Art, Systems, Institutions and Statistics of Scientific Instruction applied to national industries in different countries, Volume I, Continental Europe."²³ This was intended as the first of a series of the three volumes, of which the second, dealing with the rest of Europe, and the third, dealing with the American States, were never printed. In fact, this volume was not complete when Barnard severed his connection with the bureau on March 15, 1870, and the preface to its second edition was dated Hartford, July, 1871. The whole three volumes were intended to constitute only a part of the fourth division of a gigantic scheme, conceived by Barnard 16 years before, for which the volumes of the *American Journal of Education* were intended to provide material.

On January 25, 1870,²⁴ William F. Prosser, of Tennessee, in the House of Representatives, advocated the passage of a bill for a national system of education. He adverted to the neglect of education by the United States and to the impairment of the efficiency of

²² Upon examination of these reports Mayo said that "we find it difficult to decide what better message could have been set before the educational public of the country." *Rep. of Comms. of Ed.*, 1902, I, 901.

²³ Binder's Title: *Technical Education*. Published in 20 *Am. J. Ed.*, and separately, 1872, pp. 807.

²⁴ *Cong. Globe* for 1869-70, p. 759.

the Bureau of Education by the reduction of its appropriations. In a long speech he characterized as puerile and trifling objections the arguments urged against the Department of Education by the Secretary of the Interior in 1868, to the effect that the department was not needed, as the reports of the Department of the Interior would give full educational statistics; that the information obtained by the commissioner would not be important; and that education in the States, anyway, fell within their exclusive province. He obtained little support, however, and Barnard resigned his office, to be succeeded by Gen. John Eaton.²⁵ Shortly afterwards, on June 6, 1870,²⁶ George F. Hoar, of Massachusetts, speaking on education, referred to Barnard's reputation abroad, stated that the report upon Technical Education was well worth the whole cost of the bureau to the Federal Government, and claimed that if an adequate clerical force and authority to print had been given Barnard his comprehensive survey of national education would long ago have been published.

²⁵ On Feb. 20 and 21, 1871, Hon. E. Casserly, of California, in the Senate attacked Eaton's first report.

²⁶ Appendix to Cong. Globe for 1869-70, p. 478.

Chapter X.

LAST YEARS (1870-1900).

When Barnard retired from the office of Commissioner of Education, his public career was virtually at an end. He was only 59 years of age, and he lived 30 years longer, but his period of important activity was over. For 10 years he worked at the *American Journal of Education*, and then for a score of years more he grew old gracefully, receiving the honor which was his need, becoming the Nestor of American education, harassed only by the *res angustæ domi*.

As soon as he left his office he returned from Washington to Hartford and resumed the publication of the *Journal of Education*. The report on technical schools in Europe appeared as volume 21, with a preface dated January 15, 1871. Volume 22 contained, in addition to a similar report as to Great Britain, articles on medieval universities, the Hartford high schools, schools in Belgium, Germany, France, Scotland, and Sweden, school architecture, and on nautical and agricultural education. In 1873 volume 23 followed, presenting articles on such subjects as female education, the school and teacher in English literature, studies and conduct, German, French, and English pedagogy. Volume 24 was announced as the last of the second or national series, and the subscribers were told, in a preface dated March 15, 1873, that the volumes which had been published—

presented a more comprehensive survey of the entire field of national systems and institutions of education in all countries in which schools for general or special purposes have been recognized and administered by law than is to be found in the same number of volumes in any language, so far as we know.

Barnard hoped to close his editorial labors by issuing an international series of the *Journal* in which the existing status of schools and the problems of public instruction in different countries would be discussed by educators and teachers. In volume 24 appeared articles on schools in Finland, Spain, and Scotland, endowments of American colleges, history of superior education in antiquity, early Christian schools, State systems of common schools in the United States, educational statistics of 1840 in the United States, benefactors of American education, extracts from Winterbotham's *View of the*

United States in 1796, Noah Webster's Views in 1806, English universities, teaching orders of the Roman Catholic Church, and military schools in Russia.¹

The first volume of this international series² contained an index of 150 pages to the first 24 volumes³ and then offered the reader articles upon school architecture, Frederick the Great and the Marquis of Pombal as educational reformers, the history of school punishments, English home life and education in the seventeenth century, teaching orders of the Roman Catholics, Episcopalian seminaries, the Council of Trent, Glastonbury Abbey, Vincent de Paul and the sisters of charity, Scotch parochial and elementary schools, German universities, superior instruction in Ireland, reminiscences of English and Swiss schools, sketches of Noah Webster, H. K. Oliver, Benjamin Silliman, Thomas Bewick, Robert Owen, etc.

In 1877 Barnard published volume 27, containing an extremely miscellaneous collections of articles: Efforts to Christianize the Indians, early schools in Virginia, early public schools in Massachusetts, Harvard College, Loyola, Vives and Spanish pedagogy, Oberlin and French pedagogy, Scotch universities, chairs of education, English and French views of German universities, trade schools, Edwards on Literary Institutions,⁴ military education, sketches of Cotton Mather, Benjamin Franklin, Samuel Johnson, Thomas Jefferson, Count Rumford, Stephen Girard, A. B. Alcott, and John Carter Brown, Smith College, public instruction in ancient Greece, Oxford University, Robert Lowe on classical education; school reform in Holland.

In 1878, volume 28 appeared, in which we find a letter from R. H. Quick, the English educator, stating that the Journal contains "a range of topics in the history, biography, organization, administration, institutions, and statistics of national systems, and in the principles and methods of education not to be found elsewhere in the English language." Among the articles contained in this volume we find such titles as: Reminiscences of G. B. Emerson, the Sheffield Scientific School, Foundations of Gov. Edward Hopkins in Hartford and New Haven, sketches of Miss C. E. Beecher, Wm. H. Seward, Lord Macaulay and Gibbon, Master Tisdale and the Lebanon School, the Leicester Academy, schools in English literature, with quotations from Hooke, Irving, and Wordsworth; Cambridge University, Connecticut's civil and educational policy, Durham and

¹ Barnard never issued volume 25. C. W. Bardeen, after 1901, bound up some copies of the Report of the U. S. Commissioner of Education for 1880, put a title page with a date, 1876, in the book, and called it volume 25.

² Vol. 26, 1876.

³ There are no pages from 152 to 193.

⁴ Reprinted from the Quarterly Register.

London Universities, University of Leipzig, law and professional studies.⁵

Volume 30 was published in 1880, and contained articles on Wm. T. Harris, the education of princes, Roman Catholic schools, Wellesley College, the Department of Education, kindergartens, Massachusetts academies, female education, etc.

In the preface to volume 31, dated March 1, 1881, Barnard stated that he hoped to continue the Journal for several years, but, in fact, this was the last volume issued. It contained articles on Pestalozzi, kindergartens, education of girls in Connecticut before 1800, French pedagogy, the educational needs of the South, Columbia College, public libraries in Connecticut, Connecticut school statistics for 1875, Chauncey's educational sermon in 1656, female education in England.

On September 18, 1881, he wrote⁶ that he intended to go to Saratoga in the next month, as his "health is now below par." For the first time in many years he was not doing any literary work, and indeed had not done much since the death of his son, which caused a "revolution in his inner life." He had in truth completed his work, though the serene evening of his day was still to continue for nearly 20 years.

In 1901 C. W. Bardeen, an educational publisher of Syracuse, N. Y., purchased all Barnard's stock of publications and the plates of his works, and a year later, with a title page dated 1882, he issued volume 32 of the Journal, in which he stated that Barnard had prepared parts of several volumes, as far as number 37, but that upon examination it was found that all the matter which was in shape for publication could be included in one volume. This volume contains a reprint of Locke's *Conduct of the Understanding* and of articles on the history of education in the United States, and the development of religious instruction in the United States, which Barnard had prepared for a two-volume work entitled "Eighty Years' Progress," published in 1861. E. A. Abbott's *Hints on Home Training and Teaching*, plans for the new building of the Hartford High School, a reprint of Barnard's report in 1850, articles on colleges of agriculture, and on F. W. Farrar, Elizabeth Peabody, and E. Thring are among those found in this volume.⁷

During the decade beginning in 1871 Barnard also prepared new and enlarged editions of many of his former publications, adding to their pages articles reprinted from the plates of the Journal. One

⁵ Volume 29 was never issued. C. W. Bardeen, after 1901, bound some copies of the report of the United States Commissioner of Education for 1877, with a title page, as volume 29.

⁶To Mrs. Gordon L. Ford; letter is in New York Public Library.

⁷Vide C. W. Bardeen, "Educational Journalism," address to N. Y. State Teachers' Assoc., 1885. Thos. W. Bicknell, "Brief History of Educational Journalism in N. E.," before Int. Cong. of Educators at Washington, 1886.

title at least seems to have been entirely new: "Educational Development, contributions to the history of the original free schools, incorporated academies and common schools of different grades in New England."⁸ This book contains some interesting material, such as the reminiscences of Noah Webster, written in 1840, of Heman Humphrey, Joseph T. Buckingham, Eliphalet Nott, Peter Parley, William Darlington, Josiah Quincey, etc. The latter portion of the volume discourses comprehensively on educational periodicals, school books, apparatus, and schoolhouses, literary societies, and lecture courses.

Oscar Browning referred in the *Encyclopædia Britannica*⁹ to the *American Journal of Education* as a "great work, * * * by far the most valuable work in our language on the history of education." When the United States Bureau of Education published an Analytical Index to the Journal in 1892,¹⁰ Dr. William T. Harris, then commissioner, in the preface characterized the Journal of Education as a "library of education in itself." In its publication, Dr. Barnard used the best years of his life and all his private fortune. The complete index to these volumes goes a long way toward furnishing a key to all educational literature." Sixteen years earlier, President Daniel C. Gilman¹¹ had given the Journal hardly less praise, writing that the "comprehensiveness of this work and its persistent publication, under many adverse circumstances, at great expense, by private and almost unsupported exertions, entitled the editor to the grateful recognition of all investigators of our system of education."

As early as January 24, 1878, Barnard, writing to R. H. Quick,¹² stated that the effort to publish the Journal had caused him to involve his property in mortgages. If he could do so, he would complete volume 28. If he could not meet his obligations, the plates would be melted for type metal and the volumes on hand would be sold.¹³ Quick wrote to the educational superintendents in New England: "I would as soon hear that there was talk of pulling down one of our cathedrals and selling the stones for building material." With the cooperation of Dr. William T. Harris, a corporation was organized in New York, having a capital stock of \$25,000, of which \$2,000 were paid in, to carry on the Journal. The plan was not successful, and in July, 1891, the Henry Barnard Publication Co. was

⁸ In four parts, to average 200 pages each, in all 770 pages, 1878.

⁹ 9th ed., vol. 7, p. 670.

¹⁰ Pp. 128.

¹¹ *North Am. Rev.*, January, 1876, vol. 122, p. 193.

¹² On Quick's opinion of Barnard, see *London Jour. of Ed.* for July, 1875. Quick was one of Barnard's staunchest admirers, and dedicated with "the esteem and admiration of the author" a volume entitled "Educational Reformers," stating that Barnard, "in a long life of self-sacrificing labor, has given to the English language an educational literature."

¹³ *Monroe*, p. 28.

organized and the Henry Barnard Society, payment of membership in which should entitle anyone to a discount in buying any of Barnard's books. These projects were indorsed by President Nicholas Murray Butler in the *Educational Review*,¹⁴ who said every teacher in the country ought to assist them and that the *Journal*, "this monumental work, must be found in every pedagogical library worthy of the name," for "there is no other pedagogical encyclopædia that compares with it." Little came from these schemes, however, nor did the attempt of the Connecticut State Teachers' Association in 1890 to raise an annuity for Barnard succeed. Speaking of this last plan, Dr. A. E. Winship, in the *American Journal of Education*,¹⁵ stated that "It is not too much to say that the schools of every town in the land to-day, directly or indirectly, enjoy higher and better privileges in consequences of the earnest labors and appeals of Henry Barnard." A final unsuccessful attempt to aid Barnard financially was made in 1897, when his friends in the Connecticut Legislature tried to secure for him first a pension and then a gratuity of \$4,000, which they said was about the amount he had spent from his own funds when he was a State officer.

Other laurels reached him, however. A public school was named for him in New Haven, and the name of the South Green, where he lived in Hartford, was changed to Barnard Square. In 1874, Rev. Ray Palmer¹⁶ wrote of Barnard's "career of devoted and untiring labor, in the course of which he has rendered such distinguished service to the cause of popular education." Looking over this career from the time when, in 1838, he "gave himself to the work with the enthusiasm of an apostle," Palmer concluded that, "probably, no one man in the United States has done as much to advance, direct, and consolidate the movement for popular education." Charles Northend, of New Britain, wrote in 1895 that, to Mann and Barnard—

the whole country is largely indebted for the interest that has been awakened in the cause of popular education and for the great progress that has been made in securing to the young of the present and future generations advantages far greater and better than were enjoyed by those of former times.¹⁷

A bronze medal was given Barnard at the Vienna Exposition of 1873, a gold medal and a diploma at the Philadelphia Centennial Exposition, a bronze medal at the Columbian Exposition in Chicago, a diploma at the Melbourne Exposition of 1880, and another diploma at the New Orleans Exposition of 1884.¹⁸ Columbia University honored him in 1887 with the degree of L. H. D.

¹⁴ Vol. 3, p. 409, April, 1892.

¹⁵ Boston, June 19, 1890, vol. 31, p. 392.

¹⁶ Int. Rev., vol. 1, p. 63, June.

¹⁷ N. E. Mag., N. S., XIV, 500.

¹⁸ Norton, pp. 129 to 133. In 1894, under Prof. Will S. Monroe, the class in pedagogy at the Leland Stanford, Jr., University devoted a week to the study of Barnard's life and times.

From time to time he visited educational meetings and was received with honor. At the fiftieth meeting of the American Institute of Instruction, held at Fabyans, in July, 1879, Barnard read a paper on "The treatment of neglected and destitute children," who should be taken out of their environment and put in well-ordered Christian homes, if possible, and if that be not possible, be placed in industrial homes. In 1883, at the same place and before the same association, he spoke on school supervision, giving some of his own reminiscences. In the autumn of 1888, J. G. Fitch¹⁹ met him at a teachers' meeting in Rhode Island and found him "in his honored old age as keenly interested as ever in the advancement of educational science and in the practical improvement of scholastic methods." He attended the Educational Congress at Chicago in 1893 for three weeks as chairman of the educational journal section, and was introduced to the assemblage by Bishop Fallows, who had greeted him in 1859 on behalf of the students of the University of Wisconsin. In 1894 he visited Boston, and in 1899 he addressed the Rhode Island Institute of Instruction in Providence. Every year, at the end of June, he went to New Haven to be present at the Yale commencement. Attended by his faithful daughter, his venerable figure, with its patriarchal beard, was a conspicuous sight upon the campus, and his memory of the faces and identity of the persons he met was quite remarkable. Most of his time was spent, however, in his birthplace, where he greeted benignly anyone who came to pay him respect or to ask for information. It was his habit to rise at 5 a. m. until he was 85 years old, and to work in his garden and library until noon. His *magnum opus*, or permanent monument, in the Journal was complete, "a source whence to draw the story of the early growth of American educational life." The visitor to this "sturdy pioneer of the public school system, this Nestor of the modern science of pedagogy," to whom with Mann, "we owe the initiative of our fruitful public educational methods," found him still "erect, compactly built, with a noble head and flowing white beard," looking "like a benign patriarch."²⁰ His "love of animals, especially cats, which was an illustration of his gentle kindness," led him often to write "at his desk, with a kitten on his shoulder and another playing among his papers." His family recall him as "most intolerant of personal criticism," and as never allowing "an unkind word to be spoken at his table. Even a stranger might have suffered a mild reproof, if he or she offended in this regard," when he was present.²¹

¹⁹ Notes on Am. Schools and Training College, p. 91. In August, 1899, he visited New York City.

²⁰ Critic, vol. 80, p. 84, Jan. 23, 1897.

²¹ Letters of Miss Mary Barnard, Mar. 7, 1915.

In writing a sketch of Barnard, in 1897, Frederick C. Norton gave this testimonial to the delight of his company: ²²

To see him in his ripe old age, with elastic step, upright form, manly and scholarly countenance; to hear the words of warm and courteous welcome with which he receives all who enter his home; to listen to the discourse with which he charms them, is truly a great pleasure and a great boon.

Sorrows also came to him in those later years. His only son died in 1884, and the end of long years of patient suffering came to his wife on May 14, 1891. Among the tributes to her memory we may select two. Miss Annie Eliot Trumbull wrote, in the *Courant*, of the—

pliquant brightness which never left her during her 17 years of illness and of the example she gave of pain undergone without complaint, of a trust triumphant over all burdens of weakness, abnegation, and physical distress, and of a sweet sunniness maintained even in the presence of the clouds of suffering.

Rev. W. W. Andrews, of the Catholic Apostolic Church, a man of rare sweetness of character and Barnard's college friend, wrote of her as—

a lady of rare excellencies of character, in whom the power of Christian faith and resignation was exemplified with singular beauty. Naturally of great sweetness of disposition, her severe trials and sorrows, borne with remarkable patience, gave to it a superadded charm, lifting it into the region of heavenly saintliness.

At his eighty-sixth birthday, on January 24, 1897, Barnard received signal honor. The State board of education issued a little pamphlet entitled "Suggestions for the Observance in the Schools of the Birthday of Henry Barnard," in preparation for the event.²³ On the birthday, at the hall of the house of representatives in the Connecticut State capitol, an assemblage met to do Barnard honor. Dr. William T. Harris, United States Commissioner of Education, was present, as were James L. Hughes, inspector of schools in Toronto; Prof. William G. Sumner, of Yale; President C. K. Adams, of Wisconsin University; Thomas B. Stockwell, superintendent of education in Rhode Island; Charles R. Skinner, superintendent of the public schools of New York; Rev. Thomas Shahan, D. D., of the Catholic University; and George H. Martin, superintendent of the Boston schools. Gov. Lorrin A. Cooke presided. A chorus from the Hartford High School sang an ode composed by Richard Burton:

²² Conn. Quar. Rev., p. 137.

²³ Prof. Will S. Monroe, then of the State Normal School of Westfield, Mass., at that time issued a "Bibliography of Henry Barnard." The best account of the celebration is in F. C. Norton's article in Conn. Quar. Rev., Vol. IV, No. 2, April-June, 1898, pp. 125-137; also reprinted separately as "America's Greatest Educator." The article contains illustrations of Barnard's home and of portraits and photographs of him in 1836, 1854, 1860, 1870, 1886, and 1897.

In the early days, in the morning haze,
 The builder builded this wall;
 He heard the cry of the by and by,
 He harked to the future's call,
 He saw the hall
 Of learning uplift fair and high.
 And now our sage, in his beautiful age,
 Is pillowed in memories great;
 His work is blest, for his high behest
 Was the nurture of the State.
 Then let the children for whom we wrought
 Hall him as hero now;
 The sure-eyed seer, the pioneer,
 With the silver sign on his brow.²⁴

The mayor of Hartford welcomed the visitors, and the governor stated that "the leaven introduced by" Barnard "more than 50 years ago has continued to work until we have the present free-school system." Dr. Harris said that ²⁵—

It is deemed a piece of good fortune that we are able to recognize and acknowledge the services of a public benefactor while he is yet living in our midst. Most recognition comes too tardy for the purposes of comfort and consolation of the hero himself; [but now] the Nation rejoices with Connecticut in paying the tribute of respect to the great educational counsellor of the past fifty years, for Dr. Barnard has always been retained as a counsellor on all difficult educational questions by State legislatures, municipal governments, and the founders of institutions of learning. The Nation assists you to-day in this celebration of the man who has expended his time and his fortune to print and circulate an educational course of reading of 24,000 pages and 12 million words. It assists you in bearing testimony to Henry Barnard as the missionary of improved educational methods for the schools of the people, the schools which stand before all the philanthropic devices, because they alone never demoralize by giving help, they always help the individual to help himself.

This celebration led Dr. Harris to insert in the Report of the Commissioner of Education for that year a biography of Barnard, written by Rev. A. D. Mayo, a Unitarian clergyman of great sweetness of nature, who was attached to the Bureau of Education.²⁶ Mayo felt that:

It was of the first importance that now, when the American people were becoming thoroughly aroused to the necessity of a complete reorganization of

²⁴ Miss Mary M. Adams, of Madison, Wis., sent Barnard a sonnet on that occasion, the latter lines of which read:

"We count it (time) by the seed thy work has sown,
 We mark it on that radiant vesture wrought,
 To bury ignorance and seal its tomb.
 We read it, where great Wisdom rears his throne,
 And, in the majesty of that fair thought,
 That makes the barren place know faultless bloom."

²⁵ Rep. of Commis. of Ed., 1902, I, 888. On Oct. 13, 1899, President Timothy Dwight, of Yale, in writing to Barnard referred to his "eminent service in the cause of education."

²⁶ Rep. of U. S. Commis. of Ed., 1896-97, Vol. I, pp. 769-804.

their entire system of universal education, they should know what had been accomplished and what was being widely discussed elsewhere.

Referring to Mann and Barnard, he stated that it was fitting that Massachusetts and Connecticut—

which had first established the people's common school and held fast to it through the entire colonial period should give to the country these two great men, representing the segments of the complete circle of the national education, the encyclopedic literary genius that set before the public a complete picture of the world's best educational teaching and doing, and the statesmanship that planted in the conservative soil of New England the reconstructed common school, which has been adopted as the most precious heritage of that section to the building of the new Republic.

Dr. Barnard lived three and a half years longer,²⁷ and then, on July 5, 1900, after an illness of some months from kidney and other troubles, but without suffering from declining faculties, the end came to him at 118 Main Street, the house where he was born. Quietly and peacefully, full of labors and honors, he passed to rest.²⁸ He was the last survivor of his college class. The funeral was held in his house two days later, Rev. Francis Goodwin and Rev. C. G. Bristol, rector of the Church of the Good Shepherd, officiating. The interment was in Cedar Hill Cemetery. Dr. Emerson E. White, in reporting Barnard's death to the convention of the National Education Association,²⁹ on the 12th of that month, referred to him as—

not only among the earliest, but the ablest advocate of common schools, and in his later years he carried in his memory the history of common-school progress in the United States. He was a part of that history. * * * His great work on the kindergarten preceded the practical recognition of kindergarten training in the United States.

Barnard was a—

great natural representative of the literary side of popular education. There was an imperative need of a man of large native capacity, broad culture, and catholic temperament, competent to gather into his capacious mind the entire condition of educational affairs in all civilized lands; a man by birth, education, and social connections commended to the educated class of the whole country, yet of a patriotism so intelligent and intense that he should be found ready to cast in his lot as a day laborer and, if need be, a martyr in the supreme cause of the uplifting of the masses in this Republic. He should be one who could set before every class of earnest and active teachers and educational workers the best results of educational thought and activity through Christendom in a form that would strongly commend itself to the foremost minds at home and abroad.

Such a man was Barnard, Mann's great "colaborer and complement," who had given in the *American Journal of Education* so valuable a publication that "nowhere else can be found such a num-

²⁷ At the beginning of 1900 Barnard wrote to Washington to make inquiry as to the inclusion of statistics of insanity in the coming census.

²⁸ Samuel Hart, D. D., in *56 N. E. Hist. Gen. Reg.* (April, 1902), p. 172.

²⁹ *Proceedings*, p. 24.

ber and variety of interesting monographs respecting the growth of the educational spirit and organization in the different States of the Union." Mayo asserted:

It can not be denied that the marvelous intellectual fertility of Henry Barnard, as the foremost American literary exponent of the great revival of popular education, was somewhat in the way of immediate practical results in reforming abuses and inaugurating radical changes in the schools.

Later, in the year 1900, Mr. C. H. Thurber^{20a} wrote that:

American education must pause in its unresting eagerness of progress and stand with bared head by the tomb of its fallen patriarch. For whatsoever things are true and lovely and of good report in our schools, he thought on these things, and we must think of them and of him together always.

He saw a "new generation of leadership who knew him not," but among whom he moved, a "venerable and majestic figure of the past." With high eulogy Mr. Thurber referred to the Journal as "the glory of our educational literature," and continued:

He struck good blows for normal schools, for State organization, for national supervision, for sound study of educational problems, for a long list, indeed, of the best things in education. He saw far and he saw clearly—how far and how clearly they will never know who do not make some careful study of his forceful and varied life.

At the Yale University Bicentennial, held in October, 1901, President Cyrus C. Northrop said that foremost among educational leaders who were Yale graduates and—

worthy to be classed with Horace Mann, in consideration of the originality of his plans and the extended scope of his work, was Henry Barnard, of the class of 1830, who closed his long career of usefulness in this first year of the twentieth century, a man whose influence upon the schools and the secondary education of the country was such that the largest convention of the year, with its 10,000 teachers from all parts of the country, fitly paused in its deliberations to celebrate, at one entire session, the remarkable achievements of this distinguished educator. He was a man of original ideas. He believed in progress. He never rested satisfied with what most of the world was ready to accept as the ultimate attainment. For him there was always something better further on, and the great army of educators—good and bad alike—were compelled at last to follow his leading."

These words were well deserved. Never has public education had a more ardent supporter. He consecrated his every ability to the cause and threw himself into it with a combination of scholarship and earnestness that was compelling. He lived to the good old age of three score years and ten and died poor in the world's goods but rich in the consciousness of having rendered yeoman's service to that most fundamental of the functions of democracy—public education.

^{20a} 8 School Rev., 505, Nov., 1900.

²⁰ Vide Stokes, "Memorials of Eminent Yale Men," p. 309.

In summing up Barnard's career in the *Kindergarten Magazine*, Dr. A. E. Winship wrote:

No one can ever write about American or European educational affairs from 1820 to 1875 without drawing most of his information and inspiration from the writings of Henry Barnard. He had all the instincts of the scientist, the patience of a historian, the poise of a statesman, and the zeal of a reformer.

On July 8, 1901, the National Educational Association, meeting in the city of Detroit, where Barnard had so many ties, devoted its evening session to a memorial of him.²¹ Principal E. O. Lyte, of the Millersville (Pa.) Normal School, spoke first upon Barnard's influence on the establishment of normal schools in the United States:

His educational life seemed to carry educational institutions of all kinds with it in its onward sweep. Whatever it was best to do for the advancement of education, Henry Barnard tried to do, whether it was to organize State systems of schools, to criticize existing systems, to suggest better systems, to start the wheels of educational machinery in city or State, or to record the progress of educational institutions throughout the world. His object was the furtherance of public education. The means used for this object were the means he could first seize hold of. * * * He was an indefatigable worker, thoroughly devoted to the cause of public education. With clear vision, he saw that no system of education could be successfully administered without a system of State normal schools as an integral part of the general system of education. He realized that school machinery is deadening, that the teacher is the center of the school, and that all real progress in school work must finally be made through the teacher..

Mr. Newton C. Dougherty, superintendent of schools in Peoria, Ill., spoke upon Barnard's influence upon the West, and said that this influence was "mostly due to the educational literature that he made accessible to the people." The third speaker was Charles H. Keyes, supervisor of the South District in Hartford, his subject being "Henry Barnard's home life and his work and influence upon education as commissioner of Connecticut and Rhode Island." He referred to Barnard's personal devotion to the ministry of education and to his self-surrender to the work, "which made his naturally eloquent appeals irresistible;" spoke of Barnard's earlier work, and then said that the memory of Barnard's personal friendship, during his last four years, was "one of the abiding benedictions of my life. * * * The thought of his later life was always keenly sympathetic with the best spirit of the advancing age." His rare devotion to his two daughters, Emily and Josephine, was such that:

He seemed in manner, at times, as much a gallant elder brother as a loved and loving father. * * * He had little to say of his own work, but much of that of his contemporaries, and as I listened to him I wondered that his song was ever one of praise. He seemed to remember only the good endeavor and the successful achievement of a vast number of his collaborators in his numerous and widely separated fields of labor.

²¹ Proceedings, pp. 390 et seq.

In conversation, forgetting Barnard's "distinguished and venerable appearance," one was "betrayed into the attitude of a colleague and equal," for "he impressed you as a friend of every one whose heart responded to a noble impulse."

Col. Francis W. Parker, of the University of Chicago, next spoke upon "Barnard as an educational critic." He said that Mann and Barnard belonged to those who—

believe that the inner development of the human soul in righteousness is the one purpose of education. They began with an awful scantiness and meagerness of resources; they met with sullen indifference as to common education on the part of the people, but they had sublime faith in the cause and in the people. * * * Barnard's great work was to introduce to the people of America the best that had been done in education in all parts of the world. * * * He made known to English readers Comenius, Retich, Sturm, Fellenberg, Pestalozzi, Diesterweg, and Froebel.

In the Connecticut Common School Journal he published a magazine so good that "I doubt whether there is any school publication to-day so rich in ideas and yet so adapted to the situation of the time." We owe Barnard "our profound gratitude for a vast wealth of educational literature." By way of personal reminiscence he added:

One of the most profitable days of my life was the day I spent with Dr. Barnard in visiting schools. * * * My guide was the keenest, truest critic of school work I ever knew, and I have been fortunate in knowing many.

Dr. William T. Harris, one of Barnard's successors in Washington, was the last speaker, his subject being the establishment of the office of the Commissioner of Education of the United States and Henry Barnard's relation to it. He spoke of Barnard as "a heroic figure, through his devotion to this one great purpose, namely, the preparation of a series of volumes containing all that is solid and valuable in the history of education." From Gen. John Eaton, who immediately succeeded Barnard, Harris quoted this estimate: "My indebtedness personally was great. To me he seemed to be the most eminent man at that time in the country in the knowledge of educational literature, and I felt great misgivings when I was called by Gen. Grant to become his successor."²²

In the report of the United States Commissioner of Education for 1902, Dr. Harris printed an extended chapter, treating of Barnard's life and work. In the introductory portion of the report, the statements were made that:

Dr. Barnard's work in Connecticut and Rhode Island corresponds in time and purpose with that of Horace Mann, in Massachusetts. Their names are indeed inseparably associated in the movement which determined for all time the essential features of public systems of education throughout our country.

The work of Dr. Barnard, in inviting practical reforms in education, was supplemented by that of collecting in one great body the written records, not

²² Rep. of U. S. Commis. of Ed., 1902, I, 901.

only of this movement, but of all similar movements in the history of mankind, and it is as an untiring collector and publisher of information pertaining to the interest which absorbed his attention, his fame has spread to all civilized nations. His enthusiasm for this particular line of research naturally directed his mind to the importance of some central clearing house of educational information and he seems to have been the first person to publicly suggest such an agency.

His name is identified with all the preliminary measures that led eventually to the establishment of the National Bureau of Education, and he naturally received the appointment of commissioner, immediately upon its creation.³³

The Rev. A. D. Mayo wrote further in the report:

He was all his life the friend and adviser of every important movement for educational reform in every State, from Horace Mann and his colleagues in Massachusetts to the men who shaped the educational systems of the new States of the West * * * Indeed, it would be difficult to name the department of educational activity in the century in which Henry Barnard did not appear as a most welcome, suggestive, and inspiring worker.³⁴

Such were the judgments of Barnard's contemporaries and friends. After the lapse of years, reviewing his career as we have done, we can characterize him from a more objective point of view. He was a man of a vision, who in season and out of season preached the message of that vision. He early saw that a Republic with universal suffrage must have universal education, imparted to all the children of the people, in a school year of full length, by the instruction of thoroughly trained teachers, many of whom should be women, in buildings suitably constructed for educational purposes, equipped with sufficient furniture, apparatus, and libraries. This instruction should be supplemented by lectures, and the teachers should be rendered more efficient by means of teacher's institutes periodically held and also by means of educational literature, which should appear both in the form of magazines and of books. Toward the achievement of this ideal he labored for years and accomplished much. He was a veritable apostle of education and brought to the United States not only his own message, but also the messages of great European educators. He saw that the State must concern itself with the task of instruction and not leave it to the country or township exclusively, and that there was a great opportunity for the Nation to assist in educational matters, at least in the way of the collection and diffusion of information upon such subjects. Like that of all human beings, his view was not complete. Though the president of two institutions of higher learning, he never seems fully to have integrated his educational system, from its base in the primary school to its summit in the university. Nor did he develop during his later years, as in his early ones. His constructive work was finished by 1860, and the remaining 40 years added little to the breadth of the vision or to its

³³ Rep. of U. S. Commis. of Ed., 1902, XLIX.

³⁴ *Ibid.*, I, 892.

details. Like all men who see visions, he appeared visionary at times to other men, and wrapt in the contemplation of his ideal he sometimes lost sight of the practical. Sacrificing his time and money to his great cause, he did not always remember that other persons could not be expected to make like sacrifices to the same cause.

When all is said and done, however, Dr. Barnard remains a majestic figure in the history of American education, worthy of the veneration and gratitude of all. With the name of Horace Mann, his name will always be linked as one who aroused public interest in public education, who convinced people of the need of professionally trained teachers, of proper schoolhouses, of adequate educational apparatus, of sufficient educational literature, of a course of study adapted to the needs of all the youth of all sections of the country. These are no small services to the United States, and those who come after must not take these gifts as a matter of course, forgetting the men to whose exertions they are due. Not only the teachers, but all those taught in all the schools of the Republic owe a debt, ever to be remembered, to Henry Barnard for his single-minded life-long devotion to the educational ideal which came to him in that vision which was vouchsafed to him when he sat, as a young man, in the Connecticut Legislature.

APPENDIX.

REMINISCENCES OF HENRY BARNARD.

By DAVID N. CAMP.

[Written Mar. 17, 1916, when Mr. Camp was 96 years old.]

My acquaintance with Mr. Barnard began in 1838. The board of commissioners had been created by the legislature, 1838, and Mr. Barnard had been appointed secretary. He became the executive officer of the board, and one of his first official acts was to make provision for a teachers' institute, or temporary normal school, believed to be the first in America. It was my privilege to be a member of that institution. About 25 young men, nearly all of whom had had some experience as teachers, met in a room of the Hartford Grammar School and received instruction for nearly two months from Mr. Wright and Mr. Post, of the grammar school; Prof. Charles Davies, of West Point; Rev. Dr. Barton, of Andover, Mass.; Mr. Gallaudet and Mr. Brace, of Hartford, and others. The instruction and lectures were invaluable, but free to the students. Nearly the whole expense of the institute was borne by Mr. Barnard. He also edited and published the Connecticut Common School Journal from August, 1838, to August, 1842. This periodical was also a matter of expense to Mr. Barnard, but served as an important agency in communicating with school officers, teachers, and the people of the State. It also presented the condition and characteristics of schools in Connecticut and other States and many of the countries of Europe.¹

When the Connecticut Normal School was established, in 1847-1850, Mr. Barnard was appointed principal and superintendent of common schools. As I became a teacher in the normal school, I saw Mr. Barnard often. He took some of his meals with my family and I as often ate at his table when called to his house on business. Later in our friendship his son recited to me, and I was often at the family board.

I became impressed with the refinement and charm of the family. Mrs. Barnard was a cultivated woman, who presided with grace and dignity. She was a devoted Roman Catholic and said grace at the meals at which she presided. I do not know that Mr. Barnard made any profession of religion, but I do know that he was a man of prayer. We repeatedly traveled together, and at private houses of our friends both occupied the same chamber at night.

Mr. Barnard was ever considerate of the welfare of others. At one time we were together on a steamboat, on our way to Essex, to open a teachers' institute. We had invitations to the hospitality of a school officer. Mr. Barnard said one of us must meet our host, who will be at the wharf, and go with him to supper, while the other opened the meeting. It was agreed that he, Mr.

¹ It should be noted that from 1838-1842 Mr. Barnard was not "superintendent of schools," as given in Monroe's biography and some other books, but "secretary of the board of commissioners of common schools."

Barnard, should have supper on the boat and I should go with our host to his home. The steamboat was late and did not arrive at Essex until time of opening the meeting. We were met at the wharf by friends with carriages and taken to the assembly hall, where a large audience was waiting for the opening of the meeting. We both took part. After reaching the guest chamber at 10 p. m. Mr. Barnard recollected that I had had no supper, and taking two luscious pears from his pocket insisted that I should eat them before retiring.

Mr. Barnard was untiring in work, frequently being engaged until a late hour at night, and he justly expected full service of others. Soon after my work at the normal school began there was to be a week's vacation. As the term was closing on Saturday I received a letter from him saying that he had made appointments for me to lecture the next week in 11 different towns in Tolland, New London, and Middlesex Counties, giving two lectures each day except Saturday, and on one day three in three different towns.

Mr. Barnard never taught at the normal school, but occasionally gave a lecture or address. During his term of office, as principal and superintendent of common schools, he lectured and had meetings in the different counties of the State.

By holding teachers' meetings and attending educational conventions he did much to awaken an interest in the improvement of schools. One year he secured the adjournment of the annual meeting of the State Teachers' Association from county to county until sessions were held in all the eight counties of the State in a single year.

After Mr. Barnard's resignation in 1855 he was much of the time in the Middle West, and I saw little of him until 1863. On account of ill health I had resigned and was traveling in Europe, where I received a letter from Mr. Barnard asking me to go with him to Annapolis, Md., and assist in reorganizing St. John's College, a State institution, which had been closed during the war. Mr. Barnard had been elected president of the college. During the Civil War the college had been closed and the buildings used as offices, barracks, and for other needs of the Army. A railway track had been constructed across the college campus for the use of the Army, the fence had been destroyed, and the grounds and buildings left in an unattractive condition. Much was required in repairs and reconstruction to prepare the buildings and grounds for the reopening of the college.

I had returned from Europe in time to be present with Mr. Barnard at the opening of the college. Mr. Barnard's family came with him, or soon after his arrival, and occupied one of the college buildings. Mine came soon after and occupied another of the college buildings; so we were near each other, and I saw much of Mr. Barnard at the college and at his home.

On the establishment by Congress of the United States Bureau of Education, Mr. Barnard was appointed commissioner, and resigned his position as president of St. John's College. He wished me to go to the bureau with him. My work at first was at the office at Washington, where I saw Mr. Barnard every day. The work of the office was exacting, and Mr. Barnard was often perplexed as to what measures to adopt to secure the highest efficiency. Educators and friends had different views and sometimes obstructed rather than helped the work.

Mr. Barnard wished me to visit educational institutions and different States and report to him. In this service I went as far west as Chicago and St. Louis and was in daily communication with Dr. Barnard, but did not see him personally. He wished to obtain accurate information of the condition of schools and the educational sentiment of the country.

For instance, he had seen a large poster with his name attached setting forth the advantages to be obtained at an institution located in southern Illinois. He wished me to obtain all facts regarding it. I visited the place mentioned. As I alighted from the train I asked the station agent the locality of the institution. He expressed surprise and said he had never heard of such a place. I found other citizens equally ignorant. At last, at the post office, I found a man who directed me to a vacant lot, where I found a brick foundation of the institution described in such glowing terms. This was not the only case in which the reality was quite different from the representation made.

Mr. Barnard was desirous of obtaining knowledge of the actual condition of public and private schools from personal observation and interviews with teachers and school officers. The sickness and death of my father compelled me to be at home in Connecticut, and I saw little of Dr. Barnard until after his resignation from the bureau and he had resumed his residence in Hartford.

Our homes were then but 10 miles apart, and we frequently met. I last saw him in the sick chamber a few days before his death, when he recalled some of our experiences together and mentioned many incidents of our work.



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EDUCATION IN GREAT BRITAIN AND IRELAND

By I. L. KANDEL

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INTRODUCTION.

The educational movements that have been taking place in Great Britain during the past two or three years have aroused widespread interest among teachers and publicists in this country. The following report is an attempt to analyze these movements and to indicate their significance in the broader movement for reconstruction. The educational reforms that have already been introduced and the developments that are promised for the future are not merely the result of an emotional reaction induced by the war. Their meaning will be entirely lost unless their position in the wider program is realized. Nor are the mere details of the new acts of great significance in themselves, however striking the promised increase in educational expenditure, or the raising of the school age, or the increased supervision of adolescent welfare may be. For the student of education the feature that is of profound significance is the recognition that a sound educational system is the best foundation for the social and political reconstruction that must follow the war, and since the keynote of this reconstruction is the improvement of the position and opportunities of every man and woman as an individual and as a citizen, the educational reforms must be considered as a contribution toward the further development of the aspirations of democracy and humanity.

The present report aims accordingly to give in broad outline the general features of the developments of the past few years. It makes no attempt to deal exhaustively with the course of educational thought or progress during this time. In many cases this would be impossible. The influences of the war on education have not yet spent themselves, and to that extent it has not been deemed wise to deal with certain topics that will bear fruitful study at a later

date. It is premature, for example, to consider the effects of the war on university education. The universities have practically been depleted, and the energies of those who remained in them were devoted to war work in the main. It would be mere guesswork to attempt to predict their future course. The same arguments apply to the effects of the war on the education of women. To the extent that the educational reforms already considered aim to extend the opportunities for general education, to that extent the opportunities are open to boys and girls, to men and women equally. But what influence the increased participation of women in general public activities during the war will exercise on education, it would be premature to decide. Technical and vocational education in general will undoubtedly be profoundly affected both in their administration and in their underlying pedagogy by the new methods of training in which the demands of efficiency and speed had to be met. At present, however, any interpretation of the developments in training for war work must be postponed until sufficient data are at hand to warrant adequate conclusions or to afford reliable guidance for normal practice.

The following pages deal with the course of education and school medical inspection during the past few years, with the proposals for the reform of secondary education, with the various Government reports on different branches of education, and finally with the developments that led up to the passage of the education act in England and the significance of the act itself. A similar but briefer account is given of educational conditions in Scotland. Ireland is included, although her educational system is unlike those of England and Wales or Scotland, mainly because the stirrings for reform are noticeable there and are directly influenced by the events on the other side of the Channel. Indeed, no part of the British Empire will remain unaffected by the Fisher Act. Recent educational reports from Canada, Australia, and New Zealand indicate that attention had already been directed to England before the Fisher bill was placed on the statute book.

Much has been attributed to the education act that is not contained therein. The act must be read in connection with the act of 1902 to obtain a picture of the English educational system, but it must always be remembered that the Board of Education has the power to modify or extend the system by administrative regulations and that its annual codes have the effect of law when presented to Parliament. The system thus combines a legal minimum with the flexibility and elasticity that insure progress. In general the act of 1918 makes the following provisions:

1. Extension of the age of compulsory attendance, without exemption, to 14; or to 15 and even 16 by local by-laws.

2. Provision for medical inspection and treatment and physical welfare before and through school to 18.

3. Establishment of nursery schools for children between 2 and 5 or 6.

4. Establishment of compulsory continuation school attendance from 14 to 16 and ultimately to 18.

5. Promotion and support of poor but able pupils, with free tuition, scholarships, and maintenance grants.

6. Concentration of supervision over the activities and welfare of children and adolescents in the hands of education authorities, e. g., child labor and employment, labor bureaus, recreation and health.

7. Inspection and supervision of private schools.

8. Preservation of the independence of local authorities, extension of their functions and powers, and insistence on minimum standards with encouragement through grants to advance as far as possible.

9. Equal distribution of the cost of education between local rates and national taxes.

The act does not define the character of advanced work in the elementary schools nor the nature of the work in the new continuation schools; it barely refers to secondary schools which are undergoing many changes through administrative regulations; teachers' salaries are only indirectly touched upon. The most serious omission not only in the act but in the general discussion of the educational needs of the time is the absence of all reference to the training of teachers. The only guarantee for the success of the reconstruction program is the teacher, and yet the means by which he is to be trained have not been discussed. Improved salaries and pensions will undoubtedly produce a large number of good candidates, but in themselves salaries and pensions can not make good teachers. The existing system of training was regarded as inadequate for the needs of the elementary schools; for the secondary schools a very small percentage of teachers had specific training for teaching; while for the new continuation schools a new type of teacher must be developed. Parliamentary procedure is not required for the reorganization of the whole system and methods of training teachers; it rests with the Board of Education, and it remains to be seen how these needs will be met.

For the American student peculiar interest attaches to the educational reforms of Great Britain. They represent a genuine attempt to realize the ideals for which the war has been fought. As a contribution toward a definition of democracy through the schools, they will command the attention of English-speaking educators the world over. But in the present crisis in American education, the principles on which these reforms are founded deserve particular attention. Whether they will be realized in the near future or not, the hopes of those who desire to see increasing participation of the Federal

Government in the educational procedure of the United States are inevitably bound up with the consideration of such questions of administration as Great Britain has already determined. Such problems as the relation of the central to local authorities in educational affairs, the reconciliation of centralized supervision with the promotion of local initiative and progress, the due apportionment of central and local expenditure for education, have been settled by that genius for compromise that characterizes the British Government. In this country these problems still call for decision within State boundaries, and have barely been hinted at in the larger program that is now before the public. Those who fear bureaucratic control, as well as those who apprehend local indifference as a consequence of external action, may study both the English and the Scottish systems with profit. In addition some of the concrete provisions of the English act, as analyzed above, afford an indication of some of the needs that still remain to be met in this country on a wider scale than at present. For the rest both British and American students can to-day cooperate in promoting the world cause of democracy by learning to understand each other, and by carefully observing the contribution that each is making through the education of future generations toward the common cause.

ENGLAND.

THE SCHOOLS DURING THE WAR.

The past two years will prove to be the most notable in the history of English education. They will bear testimony to the awakening on the part of the whole nation to the value of a comprehensive national organization of education. The enactment of a new educational law August, 1918, is but the culmination of a period of activity and thought in the field of education that is almost unparalleled in the annals of English history. The most striking feature of the movement is not the volume of literature or the number of reports by professional organizations and Government commissions on different phases of education, so much as the popular interest in the subject as reflected in the current press and magazines. For the first time, probably, a welcome has been given to the various discussions of education, hitherto reserved only for reports of scholarship and examination results or of speeches at prize distributions. Events have fully justified the statement in the Report of the Board of Education for 1915-1916 that:

The war is giving new impetus and vigor to many movements for national reform and is enabling them to gain an amount of support which under normal conditions could only have been won after many years of slow progress; and

one of the most significant manifestations of its influence is the great development of public interest in education.

Public sentiment was aroused to the recognition that "a progressive improvement and development of public education is more than ever essential to the national welfare." The most hopeful sign of the present movement is that it is fundamentally a movement of the people. Without disparaging the efforts of the numerous professional bodies and other associations, it is not too much to claim that the representatives of labor and the Workers' Educational Association have played the most important part in stimulating public opinion, which only three months before the outbreak of the war received with very little interest the announcement of the Chancellor of the Exchequer that plans were being prepared for "a comprehensive and progressive improvement of the educational system." The movement is based on the profound conviction that the further development of democracy depends upon a more adequate education than has hitherto been provided. There is not associated with it primarily the purpose of improving the educational system to furnish better tools for economic competition at home or abroad. It is animated wholly by the aim of providing the best opportunities for equipping the individual with the physical, moral, and intellectual training that makes for good citizenship, that prepares for the freedom and responsibilities of adult life. Less conscious, but no less profound, is the patriotic motive to establish a memorial to those who have died that democracy might live, a national tribute to their self-sacrifice and devotion. Speaking at the conference on new ideals in education, in August, 1917, Mr. Fisher emphasized this conception and pointed to an interesting historical parallel. He said:

I will conclude with one reflection, which you will pardon me for making because I make it in my character of the historical pedant. I remember in old days reading the story of the foundation of the University of Leyden. The University of Leyden was founded in the year 1574 by the Prince of Orange to commemorate the triumphant issue of the great and heroic siege of Leyden, when, as you will remember, the gallant burghers of that starving and beleaguered city managed to hold out against the overwhelming forces of Catholic Spain. The memorial of that heroic event was the foundation of a university, a university which in the course of a generation achieved for itself the renown of being one of the most famous centers of light and learning, the University of Scaliger and the University of Grotius, and I suggest to you, ladies and gentlemen, that our memorial of this war should be a great University of England, which should be the means of raising the whole population of this country to a higher level of learning and culture than has hitherto been possible.¹

It is not claimed that what has been accomplished is either the most or the best that could have been achieved, but considering the

¹ Report of the Conference on New Ideals in Education, 1917, p. 13f.

conditions under which the progress has been made, and remembering the prewar attitude to education, there is little cause for criticism. The point that needs renewed emphasis is that public opinion in England has been changed and the history of the past two or three years furnishes a guarantee that whatever measures have been introduced to reorganize education represent but the foundations for a greater future. Education is but one of the many proposals contained in the broad reconstruction program, the realization of any one of which must necessarily and inevitably exercise a powerful influence on the others. What has been achieved so far is only a beginning of that self-conscious democracy which is the basis of any progressive system of education.

It is pertinent to review the course of English education in the four years between the outbreak of the war and the passing of the education act of 1918. The outbreak of the war found England wholly unprepared to meet the conditions arising out of the emergency. No provision existed for housing the new army, nor were there any plans for securing the large amount of civilian aid necessary to maintain the military services. A large share of the new burden fell upon the schools, many of which were commandeered by the Government for barracks or hospitals. Plans had to be improvised to take care of the dispossessed pupils at a time when numbers of teachers were either flocking to the colors or entering other civilian occupations that seemed to promise greater scope for national service and always carried larger remuneration than teaching. The situation, described in the Report of the United States Commissioner of Education for 1916,¹ remains unchanged and is thus summarized in the Report of the Board of Education for 1916-17:

The continuance of the war has inevitably imposed an increased strain upon the public educational service. Further calls have been made upon the administrative and teaching staffs of local education authorities and school governing bodies for service in Your Majesty's forces, and an increased burden has been placed on those who have remained to carry on the work of the schools; difficulties of school accommodation have been intensified, owing to shortage of labor and materials; supplies of school equipment have had to be still more severely restricted; and in many other ways sacrifices have been required which are bound to react unfavorably upon the work of education. But the extent of these sacrifices only emphasizes the admirable spirit with which the school authorities, teachers, and children have cooperated to mitigate their ill effects.

The ease with which the schools have adjusted themselves to the new demands and the emergency conditions, constantly becoming more serious because of the decreasing supply of teachers, bears excellent testimony to the flexibility of the system and the initiative of the local authorities. The educational loss, except for those pupils

¹ Vol. I, pp. 552-5.

who by a misguided policy were released from school as early as the age of 11, has not been very great. Double sessions were introduced where the dislocation caused by the military occupation of schools was severe; nonessentials were eliminated from the curriculum; more organized games and plays under suitable supervision were added; and wherever opportunity permitted, classroom work was replaced by visits to museums, art galleries, and the country. Indeed, the readjustments may prove in the future to have been beneficial, if only because they have succeeded in breaking down some of the academic and bookish formalism in the schools.

But even if the pupils had wholly missed any part of the traditional curriculum, such a loss has been more than compensated for by their participation in national activities and by a quickened sense of patriotism resulting from their sacrifices in the common cause. The Report of the Board of Education, in giving emphasis to this aspect of the school progress in 1916-17, states that:

The year has been noteworthy for its demonstration of the advantages which can be derived from enlisting the cooperation of the educational institutions of the country in the promotion of various national movements.

Not only have the pupils been stimulated by the part played in the war by alumni, or by their appearance in the school, but also by practical work that supplied some of the war needs. The boys, for example, have made splints, crutches, bed boards and rests, screens, rollers, and trays; the girls have knitted socks, mufflers, and gloves; both have cooperated in making up and sending parcels for soldiers and prisoners, and even in preparing sandbags and candles for the trenches. More significant even than this work done in the schools and by the pupils is the new position assumed by the schools as community centers. The schools have been found useful and convenient centers for distributing public notices, disseminating information on food conservation and war recipes, the promotion of thrift campaigns, and the sale of war loans. The Board of Education's Report cites a number of instances of the successful war-savings campaigns conducted by schools. One school of 1,400 pupils in three months purchased war certificates to the value of \$2,925; another with 500 pupils joined the War-Saving Association and bought certificates to the value of \$1,170; and still another with 400 pupils invested \$7,785. Out of 35,000 war-savings associations in existence at the end of June, 1917, about one-third were connected with elementary schools. In promoting food economy the lessons imparted to the children have not been lost on the parents, especially when these lessons were practically demonstrated in the domestic economy classes; in some instances such classes were also conducted for parents and adults, and exhibitions have been held in cookery and housecraft. Not only have the schools proved to be effective agencies in inculcating the new economy in the matter of

food, but they have participated in no small degree in increasing the supply. School gardens and vacant lots have been developed in constantly increasing areas.

In the County of Durham the area of school gardens has increased by 40 acres, in Hertfordshire by 27, in Buckinghamshire and Lancashire by 16 and 10, respectively. The largest number of new school gardens known to have been worked during the year were 349 in the West Riding, 200 in Durham, 145 in Buckinghamshire, and 102 in Northumberland. The development of gardening in certain towns, where the conditions of climate and soil are often unfavorable, is equally striking; 26 of the 32 schools in Birkenhead now have gardens; and all the schools at Ilkeston and Kendal have taken up land; so have 11 out of the 14 public elementary schools at Southend, and 9 of the 11 at Winchester. More than half the schools in the county boroughs of Leicester and Nottingham have started gardens during the year; Manchester has 18 school gardens, Sheffield and Tottenham have each 12, while London has about 100 gardens with 3 acres of land in all.

In addition, older pupils in elementary and secondary schools have assisted with the harvests and in fruit-picking, and in the collection of horse-chestnuts for certain industrial processes conducted by the ministry of munitions.

The credit for this "quickened consciousness of personal and national ties, the keener sense of common sacrifice and common duty," is in no small part due to the teachers, who have risen in a remarkable manner to the great task of national service. More than 25,000 of the teachers joined the colors, and of these some 2,000 have already made the supreme sacrifice. Positions that were left vacant were filled in part by married women and teachers already retired from service. With an inadequate supply and the constant drain to other occupations where the desire for what appears to be more immediate service is satisfied and increased remuneration is offered, the burden made increasing demands on the energy and devotion of those who remained. By their service in and out of the schools teachers have assured themselves a position in the life of the nation that they have never enjoyed before.

When peace is restored the teachers of England need have no fear if anyone asks them what they did in the war. They offered themselves freely, and, whether they stayed in the schools or carried arms, they did their duty, and the service of education is richer for their own practice and exemplification of those principles of civic duty and patriotism which in times of peace they taught, and not in vain, by precept and exhortation.¹

The repute and status achieved by the teaching profession will react both upon the general belief in education and on the efficiency of the public system of education. In concrete practice the awakening of the national conscience to the inadequate remuneration of teachers and the poor outlook offered to teaching as a career was slow to

¹ Board of Education, Report for 1914-15, p. 4.

manifest itself until the rising cost of living and the prospects in other occupations demanded drastic measures. Local action, dilatory at first, was stimulated by state grants, and the reports of the departmental committees for inquiring into the principles which should determine the construction of scales of salaries for teachers in both elementary, secondary and technical schools promise a new era and open up brighter prospects for the profession.¹ It is not without significance that the appearance of the first volume of the New Register of teachers issued by the Teachers' Registration Council, one of whose main purposes is to build up a unified national teaching profession with well-organized training, qualifications, and standards, should have coincided with the beginnings of this new movement.

Important as the developments in education have been during the past few years, and however bright the promise for the future, the war has had its bad effects, all of which were noted in the Report of the United States Commissioner of Education for 1916, pages 554 to 560. Conditions have remained practically unchanged in the matter of the military occupation of buildings both for elementary and secondary school purposes. The call on teachers for military service has also remained approximately the same. Owing to the suspension of the collection of statistics by the Board of Education, exact figures can not be given as to the number of children of school age absent from school for employment in agriculture and industry. The probability is that the number has been considerably reduced for a number of reasons: The Board of Education has strongly opposed the early withdrawal of children from school, and remonstrated against the abuse of the school attendance laws; the boards of trade and of agriculture have taken steps to meet the shortage of labor; wide publicity was given to the subject both before and during the consideration in Parliament of the Fisher bill, which aimed to raise the age of school attendance to 14 without any exemption. But the evil effects of the early release of some 600,000 children from school in the first three years of the war, some permanently, under the plea of war emergency, may only be realized in the future, for the new act is not retroactive, and many children will never again come under formal educative influences of any kind. The alarm aroused in 1916 by the great increase of juvenile delinquency during the war had the salutary effect of turning public attention to the problem. Whether the number of juvenile offenses has decreased or not, it is impossible to say, but the remedial and preventive measures have been increased. Wide publicity was given, for example, to the report of an unofficial cinema commission appointed by the National Council of Public Morals at the instance of

¹ See pp. 572.

a number of firms interested in the cinematograph or moving-picture business.¹ The report deals with the physical, mental, and moral effects of the moving-picture and recommends that:

For its own protection, as well as for the insuring of its continued suitability to the Nation, the cinema should have the support and the official countenance of the State. We want to place it in a position of real dignity. We want it to be something more than a trade; in fact, we wish it to be one of the assets of our national entertainment and recreation. We are anxious that the cinema should be beyond all suspicion in the mind of the average member of the public.

To attain these objects the commission urges the establishment of a State censorship, but admits that much progress has been made within the trade for the improvement of films. The Board of Education, recognizing that much of the delinquency among school children is due to lack of parental control and discipline in cases where the adult male relatives may be at the front and the mothers engaged on war work, has taken steps to encourage the development of evening play and recreation centers for public elementary school children, along the lines successfully inaugurated in London by Mrs. Humphry Ward, by offering to pay a grant equal to 50 per cent of the cost of maintenance of such centers incurred either by the local authorities or by the voluntary agencies. During the session ending July 31, 1917, 71 such centers had been recognized for purposes of the grant. For older children who have already left school the Board of Education has, at the request of the Home Office, issued a circular urging upon local education authorities—

the importance of getting into close touch with boys' and girls' clubs and brigades and similar organizations concerned with the welfare of children, and suggesting that they might offer to place schoolrooms at the disposal of such bodies in order to enable them to extend the scope of their work.

The Home Office also appointed a juvenile organizations committee to consider—

1. What steps can be taken to attract boys and girls to become members of brigades and clubs.
2. The possibility of transferring a boy or girl from one organization to another when this seems desirable.
3. The steps to be taken to prevent overlapping of work.
4. The strengthening of weaker units.
5. The difficulty of obtaining officers.
6. Difficulties in securing the use of school premises as clubrooms or play centers, and other matters relating to the effectiveness of brigades and clubs.

Another aspect of the problem was considered and a report issued by the departmental committee on juvenile education in relation to employment after the war, while considerable activity has been mani-

¹ Report of the Cinema Commission. London, Williams & Norgate, 1917.

fested by a number of local education authorities in establishing or reorganizing juvenile employment bureaus under the education (choice of employment) act of 1910. Here again public sentiment has been prepared by a revelation of the urgent need of some measures to safeguard the physical, moral, and intellectual welfare of adolescents and to accept the inclusion in the new act of the compulsory continuation school and the extra-curricular activities recommended in connection therewith.

In the absence of statistical reports it is impossible to measure the effect of the war on educational expenditures accurately. There was undoubtedly a tendency toward retrenchment in the first few months of the war, just as there was to a laxer administration of attendance laws, a weakening of discipline, and the premature release of children for wage-earning occupations. In 1916 the committee on retrenchment in the public expenditure stated in its report that:

There is a special difficulty in economizing on educational expenditure, as there is a feeling in many quarters that educational economies are dangerous and may in the long run be unremunerative. But, nevertheless, we are strongly of the opinion that every step should be taken to effect such reductions as are possible without a material loss of educational efficiency, and we are glad to learn that many education authorities have already taken steps accordingly by postponing or reducing capital expenditure on new buildings or alterations (which might normally amount to as much as £3,000,000 a year) and expenditure on decorations, repairs, furniture, apparatus, stationery, etc. Similar steps should, in our opinion, be taken by all authorities without delay.

The committee's recommendation that children under 5 should be excluded from school, and that the age of entrance should be raised to 6, does not appear to have been effectual, since during the war more than ever before mothers who were compelled to enter some form of employment needed some place in which to leave their young children. The Board of Education and many local authorities suspended much of the clerical and statistical work, reduced the amount of inspection, and, wherever possible, prevented overlapping of functions between the central and local bodies. But with the best intentions it was inevitable that the cost of education should increase, owing to the necessity of increasing salaries partly to cope with the increased cost of living and partly to keep teachers within the profession. Evening schools and classes were closed, but the amount saved here was offset by the increased attendance in secondary schools and educational activities called for in connection with the war. For the present there are available only the figures showing the expenditure of the national treasury. These indicate a constant but unequal rise, and it may be safely concluded that the local authorities spent at least as much again on education.

National educational estimates in England and Wales.¹

	1913-14	1914-15	1915-16 ²	1916-17	1917-18	1918-19
Board of Education.....	\$72,551,555	\$73,653,105	\$77,406,880	\$75,943,660	\$95,078,900	\$96,033,525
Scientific investigation.....	489,540	503,485	577,910	508,355	500,030	271,205
Department of scientific and industrial research.....			125,000	200,000	5,190,250	741,750
Universities and colleges, Great Britain, and intermediate education, Wales.....	1,571,500	1,574,000	1,561,000	1,606,000	1,606,000	1,668,500
Universities and colleges, special grants.....			725,000			150,000
Total.....	74,621,595	75,730,590	80,415,800	78,258,015	102,375,180	98,804,980

¹ Based on the Statesman's Yearbook. Estimates have been chosen because they afford a better basis of comparison up to date than the incomplete reports of expenditures.

² Actual grants at the end of the year.

It will be noticed that the expenditures show a tendency to increase. The drop in 1916-17 was due to certain retrenchments in the administration of the Board of Education office, to the closing of some training colleges, to the reduction of evening schools and classes, to the decrease in the number of children receiving free meals, and to the suspension of the special grant to universities and colleges. The striking rise in the estimates for 1917-18 was due mainly to the addition of about \$18,000,000 to the grants to be devoted primarily to the increase of teachers' salaries throughout the country. It is also partly accounted for by the extraordinary grant-in-aid of about \$5,000,000 to the Department of Scientific and Industrial Research, which was not renewed in the estimates for 1918-19 and accounts for the decrease for that year. The finances here discussed do not as yet show the effect of the act passed in August, 1918, which may in time more than double the share of educational expenditure borne by the national treasury. Some of the new burdens assumed since the outbreak of the war, but as yet not exerting much influence, are as follows: Half the cost of maintaining adequate schemes for medical treatment; half the cost of evening play centers, schools for mothers, and nursery schools; half the cost of salaries for trained organizers and supervisors of physical training and games; increased grants to secondary schools for general purposes and for approved advanced courses; the increased cost of pensions to teachers already retired, which were raised in 1918 by almost 50 per cent; and the payment of the pensions granted under the superannuation act, 1918. The directions of future increase in the national expenditure for education are indicated by the promise of the new act. The Board of Education will pay grants equal to half of the local expenditure, which will show a rapid rise in numerous directions—the further expansion of medical inspection and treatment, the introduction of advanced work in elementary schools, increased provisions for secondary schools and higher education, the establishment of continuation schools, increased extra-curricular activities in connection with all types of

schools, and the adoption of new scales of salaries for teachers based on a minimum considerably higher than that which prevailed before the war, and a maximum from 50 per cent to 100 per cent higher than the present and within the reasonable reach of most teachers. Consideration has not yet been given to the extension of technical education, the improvement of the training of teachers, and the increasing needs of the universities. Mr. Lloyd George at least intimated to a deputation representing the interests of the University of Wales that the treasury would consider an increase of State aid to universities.

The vast and unproductive expenditure demanded for the conduct of the war has awakened the country to a realization of its tremendous financial strength. The solidarity essential to the war has developed a National and State consciousness that has perhaps lain dormant hitherto. The revelation of the extent of her social defects has turned the attention of the nation to the desirability of dedicating the financial strength of the State to the task of reconstruction. After the war England is likely to present to the world an example of a nation that fosters, encourages, and subsidizes local development in all directions without interfering with the initiative and variety of experimentation that are of the very essence of progress in a democracy. Standards will, of course, be maintained, but only the minimum will be insisted upon by the State; uniformity will no doubt be required in carrying out the minimum standards, but for the rest local authorities and private bodies will be allowed free scope for development. Nothing that has occurred during the war has shaken the English faith in the principle of freedom in local government; but the war has had the effect of arousing that sense of responsibility and the social conscience that are the corollaries of freedom. No better illustration of this can be found than the history of the Fisher bill, which began its career in Parliament in August, 1917.

MEDICAL INSPECTION OF SCHOOLS.¹

In an admirable report, which like its predecessors may well serve as a model of what a public educational report should be, the chief medical officer of the Board of Education presents an account of the progress of the school medical service during 1916, and continues to emphasize the importance of this work, not merely for the physical and intellectual welfare of the children concerned, but as the foundation for social progress. While the war has interfered in no small degree with the complete working of medical inspection and treatment, it has had the effect of emphasizing the importance of the child as a national asset.

¹ Annual Report for 1916 of the Chief Medical Officer of the Board of Education. (Cd. 8746.) London, 1917.

The future and strength of the nation unquestionably depend upon the vitality of the child, upon his health and development, and upon his education and equipment for citizenship. Great and far-reaching issues have their origin and some of their inspiration in him. Yet in a certain though narrow sense everything depends upon his physique. If that be sound, we have the rock upon which a nation and a race may be built; if that be impaired, we lack that foundation and build on the sand. It would be difficult to overestimate the volume of national inefficiency, of unfitness and suffering, of unnecessary expenditure, and of industrial unrest and unemployability to which this country consents because of its relative failure to rear and to educate a healthy, virile, and well-equipped race of children and young people. There is no investment comparable to this, no national economy so fundamental; there is also no waste so irretrievable as that of a nation which is careless of its rising generation. And the goal is not an industrial machine, a technical workman, a "hand," available merely for the increase of material output, and the acquisition of a wage at the earliest moment, but a human personality, well grown and ready in body and mind, able to work, able to play, a good citizen, the healthy parent of a future generation. If these things be true, as I believe they are, no reconstruction of the State can wisely ignore the claims of the child.

The national belief in the value of school medical inspection and treatment is best indicated by the efforts to maintain them in spite of the inroads made by the war emergency on the supply of doctors and nurses. The result of an experience of less than 10 years since the system was established as part of the school system is summarized in the following statements:

To-day hundreds of thousands of children are healthier, better, and brighter for its labors. In large towns and small country villages there has arisen something of a new understanding of the child. He is coming steadily into his kingdom, into his individual birthright of health and well-being. Even in time of war, when the preoccupation and exigencies of the military situation have made exceptional demands upon the staff of persons, officials or voluntary, who have devoted themselves hitherto to the welfare of the child, the claims of the school medical service have been sufficiently valid and obvious to secure the maintenance of an irreducible minimum of its working.

So great is the value attached to school medical inspection that its extension voluntarily to secondary schools has been encouraged in recent years and has been assured by the new act both for secondary and continuation schools.

The full operation of the act and regulations bearing on medical inspection requires four inspections of children—at entrance, in the third and the sixth year of school life, and at the time of leaving school. Owing to the curtailment resulting from the war, provision was made in 1915 and 1916 only for the inspection and treatment of children who appeared to be ailing and for the maintenance of any treatment already undertaken. Of the 5,306,411 children in average attendance, 1,446,448 were medically examined in 1916, instead of the two millions who would normally have received attention. In spite of this decrease the total expenditure on the school medical service amounted to \$2,089,350, an increase of 28 per cent over the

expenditure for 1913-14. Approximately half of the cost was met by grants from the central authority. The scope of the work is indicated in the employment of 772 school medical officers and assistants and 441 medical officers employed on such special work as ophthalmic surgery, aural surgery, dental surgery, X-ray work, and administration of anesthetics. The medical officers were assisted by 1,527 school nurses, and in a number of areas arrangements were made with local nursing associations for the services of their nurses. Since the work was limited to ailing children, the burden of discovering children who appeared to need medical attention fell upon the teachers, who have always cooperated heartily in the work since its establishment, and in a number of areas memoranda were issued by the school medical officers for their guidance. The following outline, drawn up by Dr. J. T. C. Nash, of Norfolk, should be of service to teachers interested in school hygiene:

Routine school medical inspection being in abeyance, the following notes have been drawn up by the school medical officer to guide teachers in detecting some defects, which should secure amelioration. The attention of the local care committee should be called to any cases discovered, so that they may be "followed up"; particulars should also be sent to this office:

I. Defective eyesight may be suspected when a child—

- (1) In a back row can not read what is written on the blackboard.
- (2) Can not tell the time by the clock at a little distance.
- (3) Fails to keep to the lines when writing.
- (4) Misses small words when reading.
- (5) Habitually holds a book nearer to the eyes than 12 inches when reading.
- (6) Complains that the letters run into one another.
- (7) Squints, even if only occasionally.
- (8) Complains of tiredness of the eyes or of frontal headache after reading or sewing.

II. Defective hearing is often present when a child—

- (1) Is a mouth breather.
- (2) Has a "running" ear.
- (3) Looks stupid and does not answer questions addressed in an ordinary voice, though otherwise intelligent.

Such a child should be tested for deafness by a forced whisper, beginning at 20 feet and gradually lessening the distance until the "forced whisper" is heard. Report the distance at which this is heard.

III. Inflammation of the eyelids, with scabs or discharge from the eyes, should receive attention from a doctor.

IV. Earache. This should always receive attention from a doctor.

V. Gumbolls. These should receive attention from a qualified dentist.

VI. Enlarged tonsils and adenoids may be suspected when a child—

- (1) Is stated to snore or breathes noisily during sleep or when eating.
- (2) Is a mouth breather—open mouth.
- (3) Is frequently troubled with nasal discharge.
- (4) Becomes deaf when it has a cold.

VII. Loss of flesh and frequent cough should receive attention from a doctor. These symptoms may be due to many different causes and are by no means peculiar to consumption.

VIII. Heart disease should be suspected if a child—

- (1) Is always pale.
- (2) Has palpitation and shortness of breath on exertion.
- (3) Is blue in the face.

IX. Rheumatism. Children who often have sore throats and "growing pains" should be suspected of rheumatism. They require to see a doctor.

An important conclusion that has resulted from the experience of the last 10 years is the emphasis "on the fact that the problem of school attendance is, in the main, a medical problem." Since the teachers and school attendance officers have cooperated closely with the medical service, the number of absences from school for causes other than medical has decreased, while the average percentage of school attendance has increased. This situation has necessitated the development of a new type of attendance officer and the suggestion is put forward that "the most suitable visitor to send to the home of a child absent from school on alleged medical grounds is a woman health officer," who would be in a better position than an attendance officer to discover the nature of the ailment and to advise the parents. In the Borough of Taunton, where no men attendance officers have been employed for the past five years, there was an increase in the percentage of average attendance, and a decrease in the number of absences on grounds other than medical and in the frequency of prosecutions.

Not the least valuable part of the work of the school medical services has been the number of special inquiries, which were begun in 1909 and of which 350 have been made. These, as their titles indicate, are of great practical value not merely for the medical service itself but also for teachers and principals of schools. Many studies conducted in this country by the departments of school administration have been undertaken in England by the school medical officers. The only studies in England on retardation, for example, have resulted from such inquiries.¹

Although the school medical inspection has necessarily been curtailed, the provision of medical treatment showed some progress even during the war. Of the 319 local education authorities, 219 had established 480 school clinics, all of which are extensively used. The more progressive authorities, like Birmingham, Bradford, and Sheffield, have provided comprehensive schemes with clinics available for medical inspection, and the treatment of minor ailments, teeth, skin, and X-ray operations, eyes, ears, and tuberculosis. A number of authorities cooperate with hospitals either as a supplement to or as a

¹ The study of this subject by the director of education of Blackpool came to the author's attention after this was written.

substitute for school clinics. Considering the immense importance of medical treatment in the scheme of a school medical service, it was found that the provision was still inadequate, and in 1917 the maintenance of an adequate system of medical treatment was made one of the conditions of the grant paid by the Board of Education. According to the latest regulations the standards of an efficient scheme of school medical service, on the basis of which a grant will be paid at the rate of one-half of the expenditure, are as follows: Arrangements must be made for the medical inspection of the four groups referred to above, for following up cases of defect and securing medical treatment where necessary, for coordinating the work of the school medical service with the work of the local public health service, and for rendering the school medical service an integral part of the system of elementary education. The whole tenor of the report is to emphasize the preventive aspect both of medical inspection and of medical treatment.

To provide spectacles, to excise adenoids, to cleanse verminous children, to extract decayed teeth is good but not the best. It is part but not the whole. It is palliative but not preventive. It is imperative in the time of reconstruction lying before us that we should turn off the tap as well as remove the flood, that we should stop the production of disease and prevent what is preventable.

The national value of the medical service which is now in its tenth year of operation is shown by the improved health of the older children. "It is significant," says the report, "that while the health and personal condition of entrants shows little or no betterment, that of 8-year-old and leaving children shows a steady improvement" in clothing, nutrition, and cleanliness of head and body. Fortunately there has been a continuance of good health during the period of the war as a result of the improved economic conditions; there have been fewer cases of malnutrition and insufficient clothing than in previous years. But that the situation is not yet one for congratulation may be gathered from the fact that:

The records of its findings (of the school medical service) show a large amount of ill-health, of bodily impairment, and of physical and mental defect * * *. Of the children in attendance at school (six millions) we know by medical inspection that many, though not specifically "feeble-minded," are so dull and backward mentally as to be unable to benefit from schooling, that upward of 10 per cent of the whole are at a like disability on account of uncleanness, and that 10 per cent also are malnourished. Then we come to disease. Perhaps the largest contributor is dental disease, which handicaps children almost as seriously as it does adolescents and adults. Probably not less than half the children are in need of dental treatment, and a substantial number (not less than half a million) are urgently so. Again, upward of half a million children are so defective in eyesight as to be unable to take advantage of their lessons. Many of them need spectacles, some ophthalmic treatment, others special "myopic classes," and all of them careful supervision and

attention. Next we must add diseases of the ear, throat, and lymphatic glands involving another quarter of a million in a relatively serious condition. Then there come skin diseases, disorders of the heart, infectious disease, and tuberculosis.

The recognition of these facts, serious though they are, represents the awakening of a national conscience, which "finds its origin partly in the fuller appreciation of the importance of saving life, and partly in a larger understanding of the necessity of preserving and equipping the life we have."

How extensive the ramifications of a national system of school medical service are is indicated by the attention given in the report to all those agencies and activities essential to its successful operation. Extensive as the list of these agencies is, it can be supplemented by welfare supervisors, probation officers, children's care committees, juvenile employment committees, scoutmasters, leaders of boys' and girls' clubs and brigades, to whom only passing reference is made.

The safeguarding and protection of early child life may be promoted by the training of mothers in prenatal and infant care and management, the foundations for which may be laid in lessons in mothercraft to the older girls in the elementary schools. Under regulations of the Board of Education, issued in September, 1918, grants will be made to efficient schools for mothers at the rate of one-half of the approved expenditure. Day nurseries, *crèches*, and nursery schools are important cooperative factors in preserving the health of young children in the preschool period, particularly in crowded urban and industrial districts. Their importance has been recognized by the payment of grants-in-aid up to 50 per cent of the cost of maintenance by the Board of Education and more recently in the act by the incorporation of nursery schools in the national system of education. "The purpose of nursery schools is not to teach the three R's, but by sleep, food, and play to provide the opportunity for little children to lay the foundations of health, habit, and a responsive personality." For the children of elementary school age medical inspection and treatment must, in the words of the report, be supplemented by—

(a) the feeding of the child, by the parent or under the education (provision of meals) act, or otherwise; (b) the supply of fresh air for the child by means of open-air schools, playground classes, or adequately ventilated schoolrooms; (c) the exercise of the child's body by the adoption of an effective system of physical training; (d) the warmth and protection of the child, by requiring that it shall be sent to school properly clothed and that the schoolroom is sufficiently heated; and (e) the maintenance of the cleanliness of the child, by insuring that dirty and verminous children do not contaminate clean children at school, and that for the school itself bath and lavatory accommodation is available.

All of these agencies are now more or less adequately provided. A significant fact refuting the fears that the public provision of meals

would pauperize the parents is the decrease in the number of children receiving free meals from 422,401 in 1914-15, a large figure due to the industrial disorganization consequent on the outbreak of the war, to 117,901 in 1915-16 and 63,939 in 1916-17. Open-air schools are supplemented by classes conducted in playgrounds, parks, and open spaces, by school journeys, holiday and night camps, and open-air classrooms. The war has had a special influence in drawing attention to the value of life in the open air, and its extension is to be promoted and encouraged under the new act. To stimulate the further development of physical training, play, and games, the board in 1917 undertook to meet half the cost of the salaries of trained organizers and supervisors of these subjects and half the cost of maintaining evening play and recreation centers for children and young persons. Finally, to insure cleanliness, many schools are providing for school baths and showers in new buildings—an addition that is inexpensive.

The twofold aim of the school medical service—to enable the child through improved physique to benefit from instruction in school and to lay the foundations for the physical well-being of the nation—finds expression throughout the report. One of the most serious menaces to the success of this work is found in the engagement of children on leaving school in employments dangerous to their health. For this reason emphasis is placed on the medical inspection of children immediately before leaving school on the basis of which advice can be given on the choice of employment.

The physical injury (of a wrong choice) which manifests itself is insidious and inconspicuous but far-reaching. Malnutrition, anemia, fatigue, spinal curvature, and strain of heart or nervous system are conditions the discovery of which generally calls for clinical investigation and careful inquiry. They do not catch the eye or arrest the attention of the casual observer. But they are profoundly important for two reasons; they lay the foundations of disease, and they undermine the physiological growth of the child at a critical juncture in life. * * * It is the conditions rather than the character of employment which tend to injure the child.

Such conditions will no doubt be improved by the restriction imposed on child labor by the new act and the extension of the medical service to embrace pupils in secondary and continuation schools. The last provision closes the gap which existed hitherto between the medical inspection of children in the elementary school and the protection of wage earners under the National Health Insurance Act.

As soon as normal conditions are again restored, England will have established the broadest and most far-reaching system of health supervision, one that will affect every member of the population. Beginning with the maternity centers and unifying all the agencies both public and private for the promotion of health through childhood, adolescence, and beyond, the system will not only give every child a better chance of surviving but will through improved measures pro-

mote the physical and thereby the intellectual and spiritual well-being of the nation. The next few years will not only see the extension of the program in the schools but the application of the lessons of the war to industry. New light has been thrown on the relations between health and economic production that will prove as significant and far-reaching as the experience of the school medical service during the past 10 years.

In this country, where only a beginning has been made with the medical inspection and treatment of school children, parents, teachers, medical profession, and organizations for social service can have no better lesson brought to their attention than England's example. For those interested in establishing national standards of health there can be no more profitable subject for study than the irreducible minimum of a school medical service presented in the report here discussed:

- (I) That every child shall periodically come under direct medical and dental supervision, and if found defective shall be "followed up."
- (II) That every child found malnourished shall, somehow or other, be nourished, and every child found verminous shall, somehow or other, be cleansed.
- (III) That for every sick, diseased, or defective child, skilled medical treatment shall be made available, either by the local education authority or otherwise.
- (IV) That every child shall be educated in a well-ventilated schoolroom or classroom, or in some form of open-air schoolroom or classroom.
- (V) That every child shall have, daily, organized physical exercise of appropriate character.
- (VI) That no child of school age shall be employed for profit except under approved conditions.
- (VII) That the school environment and the means of education shall be such as can in no case exert unfavorable or injurious influences upon the health, growth, and development of the child.

EDUCATION OF WORKING BOYS AND GIRLS.

The departmental committee on juvenile education in relation to employment after the war was appointed by Mr. Arthur Henderson, then president of the Board of Education, in April, 1916—

To consider what steps should be taken to make provision for the education and instruction of children and young persons after the war, regard being had particularly to the interests of those (1) who have been abnormally employed during the war; (2) who can not immediately find advantageous employment; (3) who require special training for employment.

The committee of 16 members, representing educational administration, social workers, and the teaching profession, met under the chairmanship of the Right Hon. J. Herbert Lewis, and issued its report, generally known as the Lewis Report¹ in March, 1917. The

¹ Final Report of the Departmental Committee on Juvenile Education in Relation to Employment after the War. 2 vols. Cd. 8512 and Cd. 8577. (London, 1917.)

committee took the evidence of a large number of representatives of industry and commerce, labor and education.

The committee recognized that their problem was really "the standing problem of the adolescent wage earners," similar to that which the consultative committee had considered and upon which a report upon attendance at continuation schools had been issued in 1909. On the basis of statistics for 1911 it was found that, of 650,000 children between 12 and 13 enrolled in public full-time day schools (elementary, secondary, junior, and technical), only 13 per cent are likely to have a full-time education after the age of 14, and that this number would dwindle to less than 1 per cent between the ages of 17 and 18. Of about 2,700,000 young persons between the ages of 14 and 18 in 1911-12 about 81.5 per cent were not attending any kind of school, and of the remainder very few completed the annual courses for which they registered in evening schools. The decline of apprenticeship, the development of a large number of initially attractive but ultimately blind-alley occupations, the increased industrial opportunities created for young persons by the war demands, together with high wages and relaxed discipline and control, all combined to bring about a serious situation for the country, which would be intensified by the inevitable dislocation of industries at the close of the war. The solution of the problem demanded a new outlook.

Can the age of adolescence be brought out of the purview of economic exploitation and into that of the social conscience? Can the conception of the juvenile as primarily a little wage earner be replaced by the conception of the juvenile as primarily the workman and the citizen in training? Can it be established that the educational purpose is to be the dominating one, without as well within the school doors, during those formative years between 12 and 18?

The committee strongly urged the raising of the elementary school age to 14 without any exemptions whatever and compulsory attendance at a day continuation school between the ages of 14 and 18 for 8 hours a week for 40 weeks in the year. Broken terms both on entering and leaving school should be avoided by having definite times in the year for each. Criticizing the work of the elementary schools, the committee found that too frequently pupils in upper grades were merely marking time, and recommended the introduction of more practical education in place of the prevalent bookish type. "No child should feel on leaving school that he has attained to the fully independent status of wage-earning manhood." In defining the scope of the work to be offered in a continuation school the committee urged the postponement of specialization to the last two years (16 to 18), the first two years (14 to 16) being general in character.

We do not regard the object of establishing continuation classes as being merely an industrial one. The industries stand to benefit amply enough, both directly through the beginnings of technical instruction and indirectly through the effect of education upon the character and the general efficiency of those who come within its influence. But we are clear that the business of the classes is to do what they can in making a reasonable human being and a citizen, and that, if they do this, they will help to make a competent workman also. Though this is wholly true, it is also true that education must be approached, especially at the adolescent stage, through the actual interests of the pupil, and that the actual interests of pupils who have just turned a corner in life and entered upon wage-earning employment are very largely the new interests which their employment has opened out to them.

Local adaptation would accordingly be essential in both stages of the four-year course, with a vocational bias and a number of alternative courses. In the second stage some emphasis might be placed upon technical subjects bearing on the students' special work.

A liberal basis is still essential, and the English teaching should now tend toward a deliberate stimulation of the sense of citizenship * * *. Music, art, local history, home industries, first-aid, natural history, will all afford an opportunity for the skillful teacher, and can be treated suitably both for boys and girls.

Physical training should form part of the work of all adolescents for not less than one hour a week. Over and above the studies the continuation schools should become centers for the social and physical activities of the adolescent boy and girl; schools should be open in the evenings for recreation and games, and should be available for clubs, debating and other societies, study circles, concerts, and other organizations.

The committee did not feel that any opposition would be encountered by its proposals; parents were beginning to realize that the advantage would be in favor of the child, while employers were recognizing their responsibilities and the value of education, and the suggestions were warranted by the success of experiments in "works" schools. Assuming that the plan could be inaugurated in 1921, there would be about 2,600,000 pupils between 14 and 18 needing the service of some 32,000 teachers. The cost would be from \$35,000,000 to \$45,000,000 a year, without including the cost of providing buildings.

So far as young persons who had entered industrial life prematurely because of the war demands for labor were concerned, the committee suggests the possibility of providing special courses and the opening of technical schools as well as for those who might be thrown out of employment as a result of the dislocation of industries that might be expected to follow the war. The committee emphasized the new opportunities and responsibilities of juvenile employ-

ment bureaus at this particular crisis. The Board of Education, cooperating with the Ministry of Labor, issued a circular (No. 1072) in November, 1918, urging local education authorities to establish centers for the educational supervision of young persons who might be thrown out of work at the cessation of hostilities. It is proposed that the Government unemployment grants, payable to young persons between 15 and 18, be made conditional on attendance at such instructional centers.

The recommendations are summarized in the report under the following headings:

(1) That a uniform elementary school-leaving age of 14 be established by statute for all districts, urban and rural, and that all exemptions, total or partial, from compulsory attendance below that age be abolished.

(2) That a child be deemed to attain the leaving age on that one of a reasonable number of fixed dates in the year, marking the ends of school terms, which falls next after the date upon which he reaches 14.

(3) That steps be taken, by better staffing and other improvements in the upper classes of elementary schools, to insure the maximum benefit from the last years of school life.

(4) That difficulties of poverty be met in other ways than by regarding poverty as a reasonable excuse for nonattendance in interpreting section 74 of the education act of 1870.

(5) That the factory acts be amended in accordance with the amended law of school attendance, and that the law of school attendance be consolidated.

(6) That the Board of Education and the Home Office do consider the desirability of transferring the work of certifying as to the physical fitness of children for employment under the factory acts to the school medical officers.

(7) That it be an obligation on the local education authority in each area to provide suitable continuation classes for young persons between the ages of 14 and 18, and to submit to the Board of Education a plan for the organization of such a system, together with proposals for putting it into effect.

(8) That it be an obligation upon all young persons between 14 and 18 years of age to attend such day continuation classes as may be prescribed for them by the local education authority, during a number of hours to be fixed by statute, which should be not less than 8 hours a week for 40 weeks in the year, with the exception of—

(a) Those who are under efficient full-time instruction in some other manner.

(b) Those who have completed a satisfactory course in a secondary school recognized as efficient by the Board of Education and are not less than 16.

(c) Those who have passed the matriculation examination of a British university, or an equivalent examination, and are not less than 16.

(d) Those who are under part-time instruction of a kind not regarded as unsuitable by the Board of Education and entailing a substantially greater amount of study in the daytime than the amount to be required by statute.

(9) That during the first year from the establishment of this system the obligation to attend classes extend to those young persons only who are under 15, during the second year to those only who are under 16, during the third year to those only who are under 17, and subsequently to all those who are under 18.

(10) That all classes at which attendance is compulsory be held between the hours of 8 a. m. and 7 p. m.

(11) That it be an obligation on all employers of young persons under 18 to give them the necessary facilities for attendance at the statutory continuation classes prescribed for them by the local education authority.

(12) That where there is already a statutory limitation upon the hours of labor, the permitted hours of labor be reduced by the number of those required for the continuation classes.

(13) That in suitable cases the young persons be liable to a penalty for nonattendance; and that the parent or the employer be also liable in so far as any act or omission on his part is the cause of failure in attendance.

(14) That the local administration of the employment of children act of 1903 be transferred to the local education authorities; that it be an obligation on every local education authority to make by-laws under the act; that the statutory provisions of the act be extended; and that the Board of Education be the central authority for the approval of by-laws under the act.

(15) That the curriculum of the continuation classes include general, practical, and technical instruction, and that provision be made for continuous physical training and for medical inspection, and for clinical treatment where necessary, up to the age of 18.

(16) That suitable courses of training be established and adequate salaries be provided for teachers of continuation classes.

(17) That the system of continuation classes come normally into operation on an appointed day as early as possible after the end of the war, and that the Board of Education have power to make deferring orders fixing later appointed days within a limited period, where necessary, for the whole or part of the area of any local education authority.

(18) That the obligation to attend continuation classes be extended to children who are under 14 when the act comes into operation, although they may already have left the day school.

(19) That the attention of local education authorities be drawn to the possibility in certain cases of providing special full-time courses for children and young persons who have been abnormally employed.

(20) That in areas where maintenance allowances from public funds are available for the relief of unemployed young persons after the war, attendance at any classes that may be established for such young persons be a condition of relief.

(21) That the system of juvenile employment bureaus be strengthened and extended before the termination of the war, and that further financial assistance be given to local education for their maintenance.

(22) That in areas where there is probability of juvenile unemployment, teachers and other suitable persons explain to children and their parents the difficulties of obtaining work and the advantages of prolonged attendance at school.

(23) That the State grants in aid of present as well as future expenditure on education be simplified and very substantially increased.

The recommendations of this committee attracted widespread attention; comparison with the education act will indicate that most of these suggestions have been incorporated, that, indeed, the report of the committee furnished the general framework for the act.

SECONDARY EDUCATION DURING THE WAR.

The outstanding features in the field of secondary education are the increase in the number of pupils and the revived interest in the purposes and functions of higher education. There is perhaps no problem in the whole range of education that has been more minutely criticized and discussed than that of the place of the secondary school in a democracy and the nature of the education that it should provide. The increase of opportunities in which all may have their share is the keynote of the discussions on one side; on the other, a clear-cut definition of the boundary that separates general from specialized, technical, or vocational education is made. The demands that will be made in the new social order upon the trained intelligence of the citizen, whether as a member of society or as a member of a trade or profession or as an individual, are accepted as the proper measure of educational values. The unanimity with which these have been accepted by specialists, officials, statesmen, and the average citizen may furnish food for reflection to those who are concerned with the task of unraveling the tangle in which secondary education is at present involved in this country. The experiments that the two great democracies on each side of the Atlantic are making in this common effort to promote human progress are fraught with profound significance.

In striking contrast to this country, where the effect of the war has been to cause a reduction in the attendance at high schools, the increased prosperity in England has led to a considerable increase in the enrollment in secondary schools and an improvement in the length of school life. So great has been the pressure that in many areas schools are overcrowded, and many have a waiting list. Since the building of new schools has been stopped, and since a few are still under military occupation, overcrowding is accepted as inevitable, and the Board of Education has been compelled to relax the rules as to size of classes. At the same time the number of teachers absent on military service or war work has contributed to increase the difficulties, which have been met by the employment of women teachers in boys' schools and of such additional men as were available. "But the withdrawal from the schools of their younger and more vigorous masters, and their replacement by others of lower physique, of more advanced years, and often of inferior qualification, is an educational loss for which there can be no effective compensation." The schools have participated extensively in war work. Of the 1,056 schools on the board's list of efficient schools, 894 have given effective help in food production, in harvesting, and in producing details of munition plants and of hospital equipment.

The following table gives the statistics for secondary education from the last normal year preceding the war up to 1916-17:

Statistics of secondary education, England and Wales.

Year.	Schools on the grant list.				Schools not on the grant list.				All schools.	
	Schools.	Boys.	Girls.	Total.	Schools.	Boys.	Girls.	Total.	Schools.	Pupils.
1913-14	1,027	99,225	88,079	187,304	121	13,618	8,928	22,546	1,148	209,850
1914-15	1,047	105,096	93,788	198,884	129	14,185	9,253	23,438	1,176	222,322
1915-16	1,049	108,354	100,336	208,690	129	.....	.....	.....	1,178	.....
1916-17	1,049	113,214	105,644	218,858	129	.....	.....	.....	1,178	244,590

¹ Statistics are not available since 1914-15 for the number in the schools not on the grant list. The figures here given are based on an assumption of an increase of 10 per cent over the figures for 1914-15.

During 1917 the Board of Education issued new regulations for secondary schools in England increasing the State aid to schools on its grant list and making provision for additional grants to schools developing advanced courses for students above the age of 16 who might be desirous of specializing in certain subjects. Separate regulations were issued for Wales, more suitable to its special conditions and, while maintaining the same general standards of efficiency, basing the grants on an age-range of pupils from 12 to 18 instead of 10 to 18 as in England. Grants are also made payable for the encouragement of experimental or pioneer work. To qualify for the grant, schools must, besides submitting to inspection and offering a certain proportion of free places to pupils entering from elementary schools, provide a progressive course of general education of a kind and amount suitable for pupils of an age-range at least as wide as from 12 to 17. An adequate proportion of the pupils must remain in school at least four years and up to and beyond the age of 16; these figures are subject to modification in rural areas. The grants, based on enrollment at the beginning of each school year, are increased mainly "to secure a higher standard of efficiency in the schools, and in particular to enable them to provide more adequate remuneration for the teaching staff." The consideration of the whole question of salaries of teachers in secondary schools was intrusted to a departmental committee for inquiring into the principles which should determine the fixing of salaries and technical schools, schools of art, training colleges, and other institutions for higher education.¹

For the present no definite requirements are imposed as to qualifications and training, except that "where the board think fit, they may, on consideration of the teaching staff as a whole, require that a certain proportion of all new appointments shall consist of persons who have gone through a course of training recognized by the board

¹ See pp. 61A.

for the purpose." Revised regulations¹ were issued in 1915 for the training of teachers in secondary schools, but conditions have not been favorable to their enforcement. The regulations recognize three methods of training teachers for secondary schools: (1) The first, in which a training college or university training department assumes the whole responsibility for instruction in both theory and practice of education. (2) The second, in which the training college is responsible for instruction in theory of education and an approved secondary school assumes the responsibility for training in practice. (3) The third, in which training in both theory and practice is given in an approved secondary school by one or more qualified members of the staff. In each case no candidates may be admitted to the course of training of one year except after graduation from a university.

For purposes of recognition as an efficient secondary school the board requires that the curriculum shall meet with its approval and "provide for due continuity of instruction in each of the subjects taken, and for an adequate amount of time being given to each of these subjects."

The curriculum must provide instruction in the English language and literature, at least one language other than English, geography, history, mathematics, science, and drawing. A curriculum including two languages other than English, but making no provision for instruction in Latin, will only be approved where the board are satisfied that the omission of Latin is for the educational advantage of the school. The instruction in science must include practical work by the pupils.

The curriculum must make such provision as the board, having regard to the circumstances of the school, can accept as adequate for organized games, physical exercises, manual instruction, and singing.

In schools for girls the curriculum must include provision for practical instruction in domestic subjects, such as needlework, cookery, laundry work, housekeeping, and household hygiene; and an approved course in a combination of these subjects may for girls over 15 years of age be substituted partially or wholly for science and for mathematics other than arithmetic.

By special permission of the board, languages other than English may be omitted from the curriculum, provided that the board are satisfied that the instruction in English provides special and adequate linguistic and literary training, and that the teaching staff are qualified to give such instruction.

At present the majority of pupils remain in school up to about the age of 16. There is a consensus of opinion, as will be pointed out later, that a course of general education consisting of the subjects here mentioned shall extend from about 12 to 16. In the regulations for 1917-18 the Board of Education recommended the development of advanced courses for pupils who intended to go on to the universities and other places for higher education and research as well as

¹ Board of Education, Regulations for the Training of Teachers for Secondary Schools. Cd. 8099. (London, 1915.)

those who planned to proceed to commerce and industry. It was thought that such opportunities for specialization would serve as inducements to boys and girls to remain in the secondary schools beyond the age of 16. The suggestions contained in these regulations were subjected to criticism and are issued in their revised form in the regulations for 1918-19. The advanced courses will be founded upon the general education offered to boys and girls up to 16 and will consist of specialization for two years on a group of coordinated subjects along those lines in which a pupil has already shown ability. "In every course there must be a substantial and coherent body of work taken by all pupils and occupying a predominant part of their time, the remainder being given to some additional subjects." Three groups of subjects are contemplated: "(A) Science and mathematics; (B) classics, viz, the civilization of the ancient world as embodied in the languages, literature, and history of Greece and Rome; and (C) modern studies, viz, the languages, literature, and history of the countries of western Europe in modern and medieval times." The courses are further defined as follows:

Course A should normally include work in both science and mathematics; but this requirement may be waived for pupils who do substantial work in the biological sciences if the course is otherwise suitable and includes work reaching an adequate standard in the physical sciences.

Course B must provide for all pupils substantial work in the language, literature, and history of both Greece and Rome.

Course C must include the advanced study of one modern foreign western European language and literature with the relevant history, together with the history of England and Greater Britain. It must also include either the study of a second modern foreign language or work of good scope and standard in English language and literature.

In all advanced courses, adequate provision must be made for the study and writing of English by every pupil either in connection with the main subjects of the course or otherwise. In other respects, full freedom is left in the choice and arrangement of additional subjects, so long as the syllabus for an A course provides for some substantial work in language, literature, or history, and that for a B or C course some substantial work in subjects other than language, literature, and history.

English must be included in all the groups; in group A, the scientific, work must be offered in language, literature, and history; in groups B and C, the linguistic and literary, subjects other than these must be provided. The courses will not be rigidly defined; the board will, for example, approve courses in ancient history from the Babylonian era to the complete organization of the Roman Empire in place of the history of Greece and Rome, as well as Old and New Testament history and the origins of Christianity. In the modern studies group it was intended originally to require the inclusion of Latin, but this compulsion has now been withdrawn, and at the same time English

language and literature may be substituted for a second foreign language. The study of the first modern language must be carried to the stage where the pupil can use it as an instrument for the study of literature and history as well as higher linguistic training. It will be noticed that commercial subjects and geography are not provided for as separate groups; it is the intention of the board that geography be made an essential part of the study of history or be given as an additional subject, while commercial studies may be covered under the third group.

Grants of \$2,000 a year will be made for each advanced course that is approved by the board, and no restriction is placed upon the number that a school may organize. The grant is intended for efficient staffing and equipment. Up to November, 1917, between 270 and 280 applications had been made, mainly by schools in large urban areas, for the recognition of advanced courses of which more than half were in science and mathematics, and about two-thirds of the remainder for modern studies. Of the applications, 63 were approved in science and mathematics, 13 in classics, and 19 in modern languages.

Considerable criticism has been raised against the introduction of advanced courses on the ground that it penalizes the smaller schools, where the number of older pupils is as a rule not adequate for the organization of special work. It is felt that older pupils who desire to specialize will leave the smaller schools for schools where advanced work is offered, and it is objected that not only would the first schools be deprived of their more able product and of the grants for their attendance, but that the withdrawal of those who would normally become prefects or leaders would militate against the development of corporate life in the schools, while the transferred pupils would find difficulty in adjusting themselves to their new surroundings. It is replied in answer to such objections that the new development of education looks to the effective organization of educational facilities in an area and not the treatment of each school in isolation; since the new note is cooperation and not competition, some sacrifices must be made. There is much truth in this contention, but there is little doubt that the corporate life of some schools may suffer, although not quite to the extent claimed by the opponents of the scheme, since the withdrawal of older boys would leave a more homogeneous group behind.

The movement for the establishment of advanced courses so closely resembles that for the development of junior colleges in this country that the parallel need not be pressed. It may be pointed out, however, that the general education planned for the four years between 12 and 16 in England corresponds closely to that provided in Ameri-

can high schools to pupils between 14 and 18. The necessary conclusion must be that at the close of the advanced courses at the age of 18 a pupil in England would certainly have reached the stage of a college junior or even of a senior in America, allowing for the fact that classes will be small and methods adapted to encourage as rapid advancement as possible. The movement is one that deserves the attention of educators in this country who feel, as many do, that somewhere on the educational highway two years are lost by the American student.

The organization of advanced courses and the implications arising out of them will contribute in large measure to define the scope of the English secondary schools. Closely associated with this problem is the vexed question of examinations. The existence in England of many examination bodies without unanimity as to standards has for a long time exercised a detrimental effect on secondary education. In 1911 a report was issued on the subject of the consultative committee of the Board of Education, and in the following year the board¹ prepared the outline of a scheme upon which conferences were conducted with the universities, examining bodies, and representatives of local education authorities and secondary school teachers. In July, 1914, the scheme had advanced sufficiently to be submitted for further criticism and suggestions from those interested in secondary school examinations. This scheme proposed that examining bodies appointed by the universities should conduct two examinations, the first of those classes in secondary schools in which the pupils were about the age of 16, and the second at about the age of 18, with necessary modifications in the case of girls. The first examination, it was intended, should test the results of general education in English subjects (English language and literature, history, and geography), foreign languages, and science and mathematics, and should be of such a standard as to be accepted for entrance to the universities. The second examination was directed to test the results of specialized study of a coordinated group of subjects combined with more general knowledge of subjects outside this group; in other words, the results of the advanced courses that are now established.

The chief criticism of the examination system has always been that it was conducted by men who were out of touch with the schools, and that the examinations tended to be the goal of school work instead of a test of its results. To obviate these defects the board proposed that examining bodies should keep more closely in touch with the teachers, either by appointing representatives of the latter on their boards, or permitting them to submit their own syllabuses, or taking into consideration the teachers' estimates of the merits of candidates.

¹ See Board of Education, Circulars 840, 933, 996, 1002, and 1010.

It was further recommended that an authority be appointed to co-ordinate the standards of the examination, and it was proposed that this function be exercised by the Board of Education, assisted by an advisory committee representing universities, examining bodies, teachers, education authorities, and professional and commercial bodies.

In December, 1915, the board indicated in Circular 933 that their proposals had met with considerable approval, except that it was generally urged that the additional expenditure that would result from the scheme should be borne by the State. It was also insisted that provision should be made for the inclusion of such subjects as manual instruction, housecraft, music, and drawing in the proposed examinations. Owing to the war it was felt to be impossible for financial reasons to proceed with the plan, but the following educational points as a basis for future action met with general agreement:

- (a) Limitation of external examination to two examinations at the age of about 16 and 18, respectively.
- (b) Recognition of the principle that the group rather than the individual subject should be the unit on which success or failure is determined in the first examination.
- (c) Concentration in the second examination on a special group of studies with one or more by-subjects.
- (d) Inclusion of subjects such as drawing, music, manual instruction, housecraft, or some of them, in the scheme of examination; and
- (e) Provisions for securing the cooperation of the teachers with the examining body.

A return was made to the proposals in Circular 996, which was issued on May 25, 1917, announcing that the board intended to put the system into operation on August 1, 1917, and would serve as the coordinating authority. A secondary school examinations council was established to act as an advisory council, consisting originally of 18 and later 21 members, and including representatives of examination boards of universities (9), of the teachers' registration council (5), of the county council association (2), of the municipal corporations council (2), of a newly created standing committee of professional bodies (1), of the association of education committees (1), and of a secondary school headmaster as supernumerary. Officials of the board may attend meetings of the council, but have no vote. The functions of the council are to deal with the following matters:

- (a) The recommendation of examining bodies for approval by the coordinating authority.
- (b) The maintenance by each approved examining body of an adequate standard both for a pass in the examinations and for a pass with credit.
- (c) Investigation of complaints made by school authorities with regard to examinations.
- (d) Promotion of conferences with examining bodies and others as occasion arises.

- (e) The form and contents of the certificates granted on the result of the examinations and the arrangements for their issue.
- (f) Negotiations with universities and professional bodies for the acceptance of the examination certificates as exempting the holders from certain other examinations.

The council will act in an advisory capacity and make suggestions for reform to the board as the coordinating authority, but "the council will consult the board before committing themselves on questions of principle or policy which are controversial or specially important." No examination scheme will be approved unless it provides for bringing teachers into touch with the examining board, for examining a school on its own syllabus, if it so chooses, and the syllabus is, in the opinion of the examining body, adequate in scope or character and the estimates of candidates as reported by their principals are taken into account. The board have undertaken to pay \$10 for each pupil in a State-aided school who takes an examination as a member of his class.

The new scheme should have an important influence in reducing the existing situation to some sort of uniformity. English education has been too much subject to a system that disturbed the development of secondary education in this country in the latter part of the last century. Not only will it reduce the numerous examining bodies to a reasonable size, but the requirement that closer contact be maintained with schools will have a salutary effect in removing from the school the necessity of sacrificing the real ends of education to the examination goal. A similar attitude is developing in the matter of the award of scholarships. More and more, narrow specialization for ends that are not inherent in sound education is being eliminated, and examinations will but serve as tests to be taken in the ordinary course of developments. The problem that still remains to be solved relates to the nature of the examinations. Something has been done to discount cramming in the present regulations and to take into consideration a student's record as reported by the teachers. The next step will undoubtedly be a consideration of the reform of the character of the examinations themselves. The probability is that more attention will be given in the future to oral tests and that in the written examinations mere repetition of information will be discouraged.¹

THE POSITION OF SCIENCE IN THE EDUCATIONAL SYSTEM.*

The controversy that began almost at the outbreak of the war over the relative merits of the classics and the sciences in secondary edu-

¹ See Hartog, P. J. *Examinations and their Relation to Culture and Efficiency.* (London, 1918.)

² Report of the committee appointed to inquire into the position of natural science in the educational system of Great Britain. Cd. 9011. (London, 1918.)

cation, combined with the recognition of the inadequate attention given in schools and universities to applied science, led in 1916 to the appointment by the Prime Minister of a committee—

to inquire into the position of natural science in the educational system of Great Britain, especially in secondary schools and universities, and to advise what measures are needed to promote its study, regard being had to the requirements of a liberal education, to the advancement of pure science, and to the interests of the trades, industries, and professions which particularly depend upon applied science.

The committee, consisting of 17 members, was under the chairmanship of Sir J. J. Thomson and issued its report in 1918. Evidence was collected from schools and universities, representative men of science in the fields of agriculture, chemistry, geology, engineering, and metallurgy, and a number of leading firms engaged in engineering and the chemical industry.

After a brief reference to the history of science teaching and the prejudice against its introduction both in schools and universities, the report emphasizes the need of a wider extension of the subject:

Now it is the war and its needs that have made us once again conscious of the nation's weakness in science. But it is for the sake of the long years of peace, quite as much as for the days of war, that some improvement in the scientific education of the country is required.

With regard to the controversy between the classicists and scientists, it is pointed out that the humanizing influence of science has too often been obscured. In urging the recognition of the educational value of science, its place in education is thus summarized:

It can arouse and satisfy the element of wonder in our nature. As an intellectual exercise it disciplines our powers of mind. Its utility and applicability are obvious. It quickens and cultivates directly the faculty of observation. It teaches the learner to reason from facts which come under his own notice. By it the power of rapid and accurate generalization is strengthened. Without it, there is a real danger of the mental habit of method and arrangement never being acquired. Those who have had much to do with the teaching of the young know that their worst foe is indolence, often not willful, but due to the fact that curiosity has never been stimulated and the thinking powers never awakened. Memory has generally been cultivated, sometimes imagination, but those whose faculties can best be reached through external and sensible objects have been left dull or made dull by being expected to remember and appreciate without being allowed to see and criticize. In the science lesson, the eye and the judgment are always being called upon for an effort, and because the result is within the vision and appreciation of the learner, he is encouraged as he seldom can be when he is dealing with literature. It has often been noticed that boys when they begin to learn science receive an intellectual refreshment which makes a difference even to their literary work.

This quotation has been made at length, in spite of what will be regarded by many as faulty psychology, because it furnishes the keynote of the report and in one form or another recurs many times,

and because it is representative of the type of thought on education that is frequently found in England. The report nowhere enters into a detailed discussion of the humanizing influence of science, but here and there deprecates the fact that many of the ablest boys and girls leave the secondary schools "with little or no idea of its importance as a factor in the progress of civilization or of its influence on human thought."

Science teaching in secondary schools for boys—

is in general confined to the elements of physics and chemistry; botany and zoology are, as a rule, taught only to those boys who intend to enter the medical profession, while geology, so far as it is taught at all, is taken in connection with geography, or informally as part of the activities of the school scientific society.

Under the regulations of the Board of Education for grant-earning schools, science must be included in the curriculum, unless exceptions are permitted in special cases. But although science thus occupies a position in no way inferior to that of any other subject, the committee found a number of conditions that militate against successful work in science. Among these are : (1) Late entrance into secondary school, the assumption being that 12 should be the normal age for entry. (2) Early leaving, after less than three years in school, due to "(a) the parents' inability or reluctance to forego the wages which boys of 14 can earn; (b) the want of appreciation of the value of secondary education, even from the point of view of success in after life; (c) the tradition of beginning work at as early an age as possible; (d) the desire of the boys themselves to escape from the restraints of school life." (3) Lack of advanced work for those remaining at school to 18. (4) Inadequate staffing, equipment, and time. (5) Restricted scope, with the result that "in some cases physics up to the age of 16 means little more than practical measurements and heat, while in chemistry the theoretical foundations of the subject are often neglected." (6) Inadequate provision of university entrance scholarships for boys who have specialized in science. The situation is still less satisfactory in the public schools, many of which are not inspected by the Board of Education and in which the literary and classical traditions are more influential. It frequently happens that little or no science is offered in these schools to boys who specialize in classics, even though adequate provision is made for the subject on the modern sides. The public schools in turn exert an adverse influence on the preparatory schools because science carries hardly any weight either in the entrance or scholarship examinations.

In the secondary schools for girls the conditions are less favorable and there is even less definiteness than in the boys' schools as to the nature of education to be provided and the relative importance

of subejcts. The Board of Education, in its regulations for grant-earning secondary schools for girls, permits the substitution of a course in domestic subjects for science and mathematics after 15, and in the period preceding this age the time assigned to science is quite inadequate. In a large number of private schools the subject is omitted entirely.

With reference to secondary education in general the committee is in agreement with the present trend of thought in England that:

The best preparation for any occupation or profession is a general education reached by the average boy at the age of 16, followed, where possible, by a more specialized course on a limited range of subjects. This general education should provide normally for the study of English, including history and geography, languages other than English, mathematics, and science; each of these subjects should be regarded as an integral part of the education of both boys and girls, and a fair balance should be maintained between the time allotted to them.

In a four-year course from 12 to 16 not less than four periods a week in the first year nor on the average less than six periods a week in the following three years should be given to science. Efficient teaching of the subject should be promoted by a system of State inspection and by its inclusion in the first school examination¹ which should come at the completion of the general course at about the age of 16.

The further recognition of science in a secondary education must in the opinion of the committee be accompanied by a revision of the curriculum, which has tended to become too narrow and to be out of touch with many of its applications. "The course should be self-contained, and designed so as to give special attention to those natural phenomena which are matters of everyday experience; in fine, the science taught should be kept as closely connected with human interests as possible." The committee finds general agreement that the best preparation for the study of science in secondary schools is a course of nature study up to the age of 12, and suggests that the work of the first year might include physiography, practical work involving measurements of simple physical quantities, and serving as an introduction to some important physical branches in connection with the making of such things as electric bells, small induction coils, telescopes, pumps, and so on; where laboratory facilities are available the committee favors, in addition to physiography, "a course of elementary general science, including work of an introductory kind on hydrostatics, heat, and the properties, both physical and chemical, of air and water."

The systematic study of science, beginning at about the age of 13, should include physics, chemistry, and biology, not with a view

¹ See on the question of secondary school examinations, pp. 32ff.

to training specialists, but rather to give as good a mental discipline as possible and an acquaintance with the principles involved in the phenomena of daily experience in each of these branches. The report emphasizes the responsibility of the science teacher for the English in which the work of his class is written, and the excellent opportunities for teaching clear writing in connection with everyday laboratory work and for instilling the habit of reading books in science. Some modifications would be essential in the case of girls. Hygiene, for example, should be well taught in girls' schools, but preferably at the 16 to 18 stage:

Where this is impossible definite teaching on the laws of health and on personal hygiene may well form part of the work of the lower forms, but it can not be properly considered as a part of the science course. Similarly, lessons on the everyday affairs of the household are obviously of practical importance, and they form a part of scientific education if they are given by a teacher who has a real background of scientific knowledge. But much of the domestic science taught in schools has no claim to the name of science at all; it would be less pretentious and more accurate to call it housecraft and find a place for it outside the hours allotted to science.

At the age of 16 students may begin a more intensive study, usually for two years, of some special subject, but without neglecting other branches of the general course, especially English and mathematics, and frequently enough French and German to be used as tools. The specialists in science will carry forward to a higher stage the work in two or more of the sciences—physics, chemistry, or biology—the choice depending somewhat upon the future career of the students. The fact may here be mentioned that under the new regulations for advanced courses in secondary schools the Board of Education in 1917 recognized 63 courses in science and mathematics out of a total of 95 approved, the remainder being distributed between classics (13) and modern languages (19). At the same time it is recommended that a course or courses be offered suitable for students specializing in other subjects than science. The following courses are suggested tentatively:

A. (1) A course on the outlines of cosmical physics and astronomical principles of general interest, such as the measurement of time, the calendar, the size and mass of the earth and sun; the applications of spectroscopy to elucidate the composition of the stars, nebulae, etc.; (2) a course on the general principles of geology, without too much technical detail, illustrated by local examples and the use of geological maps; (3) a course on physiology and hygiene, which would include a discussion of the part played by bacteria and other lower organisms in fermentation and in the spread of disease; (4) a course on physical meteorology; the composition and general circulation of the atmosphere, relation of wind to pressure, storm, clouds, rain, snow, thunderstorm, the aurora, weather-mapping.

B. Courses on the history of science, e. g., (1) the history of astronomy from the Greeks to Newton, including some account of the geocentric and heliocentric

systems; (2) the history of mechanics on the lines of the earlier portions of Mach's *Principles of Mechanics*.

C. Courses on the development of scientific ideas, e. g., the constitution of matter; the conservation of energy; the doctrine of evolution; heredity; immunity.

D. The lives and work of scientific men, e. g., Leonardo da Vinci, Galileo, Newton, Lavoisier, Cavendish, Faraday, Clark Maxwell, Kelvin, Pasteur, Darwin, and Helmholtz.

E. The bearing of scientific inventions on industrial progress, e. g., in connection with the history of farming or other local industries; methods of transport by land, water, and air; means of communication, such as signaling, telegraphy, telephones; methods of lighting.

F. Courses of a more practical kind than those mentioned above on the particular applications of science, e. g., on the internal-combustion engine or the dynamo; such courses would appeal to boys with a mechanical turn of mind.

G. A course on the method and philosophy of science, historically treated with special reference to the work of Aristotle and his predecessors, Archimedes, Galileo, and Bacon, and the later experimental philosophers.

The committee recommends that, if a second school examination is adopted in accordance with recent proposals of the Board of Education, candidates be examined in the group of subjects in which they have specialized, together with at least one other general subject. Thus a student who has taken an advanced course in science should be examined in that subject as well as in history or an ancient or modern language or English literature. Candidates who pass the second school examination might properly be exempted from the intermediate examination which in some universities comes at the end of the first year.

The committee recognizes that any progress in the teaching of science depends on the adequate supply of teachers well trained in academic and professional subjects, and that such a supply is dependent on the payment of considerably better salaries than at present and on improvement in conditions of service. It is suggested that, in addition to university study of science, teachers be required to have one year of training, spent partly in actual teaching in a secondary school and partly in attendance at professional teachers' courses at the universities. Such training should later be supplemented by further study and visits to other teachers and schools. Other essentials to successful advancement of the position of science are suitable laboratory accommodation, equipment, and libraries, with apparatus and books, periodically renewed and supplemented.

Turning to the universities, the committee recommends an increase in the number of scholarships, especially for students of science, but based on an examination that does not encourage overspecialization in the schools. Since the need of an increased number of trained scientific workers could not be met by an extension of scholarships, it is suggested that university fees be lowered. The normal age at

which boys should pass from the secondary schools, at least to the universities of Oxford and Cambridge, should be 18 rather than 19, the usual age before the war. More adequate opportunities should be offered for students who do not intend to work for an honors degree to take a continuous course in science for a pass degree corresponding more nearly to the B. S. in this country. But the committee is opposed to one-sided specialization, since—

the increase of specialization in all branches of knowledge at the universities has brought it about that students of one branch of knowledge have little opportunity of hearing anything about other subjects. It is therefore very desirable that there should be given at the universities courses of lectures of a general character on philosophy, history, literature, science, and economics.

On the completion of the undergraduate course the committee urges the introduction of a year's research work, not so much for the sake of getting new results as for the training afforded in independence of thought, maturity of judgment, and self-reliance, and for the gain in critical powers and enthusiasm for service. The committee recommends a uniform and comprehensive system of research degrees in accordance with the resolutions passed at the Universities' Conference held on May 18, 1917. Far larger provision should be made by means of scholarships for the encouragement of postgraduate research, since "no expenditure of public money on scholarships holds out more prospects of valuable returns." For the promotion of original research by students and members of university faculties the committee recommends an increase of State grants to insure the efficient equipment of laboratories and a reduction in the amount of time required by routine duties.

The report also considers the relation of science to medicine, engineering, agriculture, the Army, the civil service, and its importance in the preparation of students for these professions. With reference to technical education outside the universities the committee recommends an increase in "the provision of instruction in pure and applied science in technical schools and institutions of all grades," including junior and senior technical schools and evening schools, all of which need to be adequately coordinated so that students can pass from one to the other. "Science, both in its general aspects and in its bearing on industry," should find a place in the courses of the proposed continuation schools, and might properly be more extensively introduced in schemes and systems for adult education. The committee declares with reference to the latter that:

We are by no means sure that popular interest in science is as great to-day as it was 30 years ago. Until this general interest in science is extended and increased and the deficiencies of adult education in this respect are made good, an important piece of work in national education remains to be done.

The report closes with a consideration of the supply of trained scientific workers for industrial and other purposes which the committee regards as a matter of the utmost gravity and urgency, for—

It is agreed on all sides that it is absolutely necessary for the prosperity and safety of the country after the war that the development of the resources of the Empire and the production of our industries must be on a scale greatly in excess of anything we have hitherto achieved. Schemes of reconstruction and development are being prepared and discussed; each one of them requires a supply of trained workers, and the proposals will be futile unless a large army of these is forthcoming.

The work of the Department for Scientific and Industrial Research, established in July, 1915, has already stimulated a new attitude among employers to the need of well-directed research, better training, and the more skillful use of scientific methods. An extensive movement has been inaugurated toward the formation of research associations in the larger industries, some working independently, some in connection with universities. This movement will lead to a demand for more trained men and will offer better recognition and higher remuneration for their services than hitherto. To meet this demand the supply on the basis of prewar statistics was inadequate. After canvassing the possibilities the committee concludes that:

It is of the utmost importance that ability should not be wasted, and if it is not to be wasted, measures must, as we have said, be taken to insure (1) that no pupil capable of profiting by a full secondary education should miss the opportunity of receiving it; and (2) that the leakage from the schools should be so far as possible stopped.

For these the doors to the universities and technical colleges must be thrown open by means of scholarships and maintenance grants, and the development of sufficient and attractive careers for trained skill and knowledge. No small factor in the movement is the dissemination of a knowledge and appreciation of the need of reform.

If science is to come by its own, the Nation as a whole must be brought to recognize the fundamental importance of the facts and principles of science to the right ordering of our national life. The more closely the work of our legislators touches the life of the people, the more intimately it is concerned with questions of food supply, housing, transport, the utilization of natural resources, and the conditions which make for bodily health, the more dependent it becomes on the skilled advice and assistance of those who can bring their knowledge of science to bear on social and economic problems. Certainly we must provide the requisite training and opportunities for those who are capable of advancing natural knowledge or acting as scientific experts. But it is no less important that we should secure for all who are of an age to receive it an education which will enable them to realize the vital need of a knowledge of science both for the individual and national well-being.

POSITION OF MODERN LANGUAGES.¹

The committee to inquire into the position of modern languages in the educational system of Great Britain was appointed by the Prime Minister in 1916, under the chairmanship of Mr. Stanley Leathes, and reported in 1918. Considerable unrest has existed for some time on the neglect of modern languages and dissatisfaction has arisen with the assumption that English alone is an adequate medium for conducting the ever-increasing world intercourse of the country. As in the case of the neglect of science the uneasiness has been not a little stimulated by the greater attention devoted to such matters in Germany. The work of the present committee must, therefore, be considered in relation to the whole movement for reconstruction in English education that will have its effect not merely on the schools but on commerce and industry as well. The province of the committee was as follows:

To inquire into the position occupied by the study of modern languages in the educational system of Great Britain, especially in secondary schools and universities, and to advise what measures are required to promote their study, regard being had to the requirements of a liberal education, including an appreciation of the history, literature, and civilization of other countries, and to the interests of commerce and public service.

The committee followed the same procedure as the committee on the position of natural science and heard witnesses representing industry and commerce, educational institutions and associations, and the public services. Questions were also sent to similar representative organizations.

An account of the history of modern languages in Great Britain indicates that the modern subjects have received adequate recognition in the schools and universities only during the past 30 years, but that public interest has not been strong and the supply of teachers with appropriate qualifications has not kept up with the demand. Several reasons, obvious to the American educator, have militated against a better appreciation of modern subjects, not the least valid of these being the richness of English literature and the extensiveness of the repertory of knowledge in most fields, as well as the insular situation of the country. Foreigners, too, have taken the trouble to learn English, so that this language served as an adequate medium of intercourse the world over. "The need of modern language study was not clear and insistent before the war." In the schools modern subjects have suffered, as most new subjects, in competition with those that have a traditional place and are encouraged by the granting of scholarships and other incentives.

¹ Report of the committee appointed by the prime minister to inquire into the position of modern languages in the educational system of Great Britain. Cd. 9036. (London, 1918.)

In competition with the classics, modern language studies suffered from uncertainty of method and of aims, from lack of established traditions and standards; teachers needed exceptional qualifications, involving unusual length of training and expense; many were accepted as instructors whose attainments were frankly insufficient. Those of the highest attainments and ideals were discouraged by indifference, sometimes by contempt and hostility.

Much progress has been made in recent years; any further advance depends on the cultivation of sound public opinion. With this end in view the committee has defined the many-sided values of modern studies, that is, "all those studies (historical, economic, literary, critical, philological, and other) which are approached through modern foreign languages":

Modern studies subserve the purposes of industry and commerce; they are needed for scientific instruction and information; by them alone can be gathered and disseminated that more intimate knowledge of foreign countries which is necessary for the wise conduct of its affairs by a democratic people; they are required for the public service of the country at home as well as abroad; through and by them our people can learn what is best and highest in other countries. Some of us may attach more importance to one, some to another of these elements, but all together must combine to supply such motives as can unite and mobilize a nation in the pursuit of worthy knowledge.

The relation and place of modern studies for each of these ends and purposes are considered in some detail. But in addition to the practical values, modern studies it is claimed are an instrument of culture—

and by culture we mean that training which tends to develop the higher faculties, the imagination, the sense of beauty, and the intellectual comprehension. Clearer vision, mental harmony, a just sense of proportion, higher illumination—these are the gifts that culture ought to bring. It can not bring them to all; in their fullness they can be possessed by few; but in some measure they may be shared by all who desire them.

If modern studies are to meet with the same success that has attended the study of the classics—

We need an ideal such as inspires the highest classical studies. The best work will never be done with an eye to material profit. We must frame our ideal so that it can be consistently pursued through the whole course of school and university life and even beyond. The first object in schools must be to lay the foundation of scholarship and skilled facility of expression and comprehension. The "more or less," the "there or thereabouts," is not good enough in language, or in any other instrument of culture or information; the standard of accuracy and of form can not be too high. Early we should also aspire to make some of the boys and girls understand that foreign languages are not learned as an end in themselves, but as a means to the comprehension of foreign peoples, whose history is full of fascinating adventure, who have said and felt and seen and made things worthy of our comprehension, who are now alive and engaged in like travail with ourselves, who see things differently from ourselves and therefore can the better help us to understand what is the whole of truth.

After discussing the general aims and purposes underlying the study of modern languages, the report takes up the question of the

relative importance of the several languages—European and non-European. French, from every point of view, is declared for English purposes to be the most important living tongue, the standard being as follows:

The importance of any language may be judged by the significance of its people in the development of modern civilization, by the intrinsic value of its literature, by its contribution to the valid learning of our times, and by its practical use in commercial and other national intercourse.

Germany, Italy, Spain, and Russia deserve a first-class place, after France, in the modern studies of the universities, and all but Russian, which is apparently not yet sufficiently organized or valuable for such purposes, should find a place in the schools. With reference to the vexed question of German, the report leaves no room for doubt as to its importance from the point of view of information in a large number of fields of human knowledge. But by the standard quoted above the report believes, that:

The time is hardly propitious for their dispassionate consideration. No doubt, as a factor of the first importance in shaping the destiny of Europe during the last hundred years, Germany must retain a permanent and compelling interest to the historical student, though the estimate of the causes which have raised her to that position may undergo changes in the opinion of succeeding generations. And on this also there will be general agreement. After the war the importance of German must correspond with the importance of Germany. If Germany after the war is still enterprising, industrious, highly organized, formidable no less in trade than in arms, we can not afford to neglect her or ignore her for a moment; we can not leave any of her activities unstudied. The knowledge of Germany by specialists will not suffice; it must be widespread throughout the people. A democracy can not afford to be ignorant. We may indicate one point in particular, which is likely to be of importance at the end of the war. It will in any case be impossible to oust the use of German in commerce, even for our own purposes at home, apart from any question of competition in neutral countries. The mere settlement of pre-war accounts with Germany will be a long and difficult matter. If we are not ourselves able to supply men who have sufficient knowledge of German to conduct the necessary correspondence, strong incentive will be offered to the old practice of employing qualified German clerks for the purpose. This is only one of many considerations which lead us to the conclusion that it is of essential importance to the Nation that the study of the German language should be not only maintained but extended.

Besides these five languages for which adequate provision should be made in all universities, the study of other European languages and of non-European languages should be promoted in various centers, determined partly by commercial needs, partly by other interests. London it is recommended should become a center for an institution for the study of the minor European languages similar to the School of Oriental Studies. In general, however, "the prospects of modern studies depend on the esteem of the public."

The nature of instruction in foreign languages must vary according to the needs, age, and training of the students. Home instruction by skilled governesses may lay a sound foundation for the future, and it is suggested that kindergartens conducted in a foreign language might serve the same purpose. Systematic study in school or university is essential and should be supplemented by residence abroad, especially by those who intend to teach. Facilities for foreign residence and the exchange of teachers and pupils should be systematically organized and encouraged.

The systematic study of modern languages should be begun in the secondary schools; the committee does not consider it advisable to introduce them in elementary schools, although the phonetic study of English might well be begun there and serve as a starting point for foreign languages. The committee does not commit itself on the question of the right age for beginning foreign-language study, but prefers to define its position in general terms:

The position of reformers is that it is neither expedient nor profitable to begin the systematic study of a foreign language in school until the child has reached a stage of intellectual development which admits of his having already received a sound training in the use of his mother tongue, as well as a reasonable discipline in the essentials of a wide general education.

The scope of modern subjects will vary somewhat according to the type of secondary school attended, and the continuity of study. The chief aim should be to give a sound training in the principles of language, and a firm basis on which a pupil can advance by private study. Intensive work on one language is much more to be commended than the sacrifice of thoroughness by the study of two or three at the same time—a practice not uncommon in England. This principle is warranted by the fact that success in one language is the best preparation, not only for its further study but for the study of a second or more languages. In a four-year course, that is, from 11 or 12 to about 16, the energies of the pupils should not be dissipated. "It should be possible in a four-year course to bring one language to a useful point with the majority; only with the minority can a second language be begun with any advantage." The economical minimum for the study of the first language is four hours a week, preferably for two years, when a second language may be taken up. Specialization in language studies should not begin until a student has passed his first school examination, at about the age of 16. The advanced courses, as defined by the Board of Education,¹ should cover as wide a range as possible, and private study should be encouraged.

The chief essential for the improvement of the status of modern studies is to secure well-qualified teachers, and this end can only be

¹ See pp. 292.

achieved by improving the pay and prospects of those who must necessarily undertake, in the case of modern languages, an unusually long, laborious, and expensive training. "It is desirable that every teacher of modern languages in a secondary school should have a university degree, should have spent not less than a year abroad under suitable conditions, and should have undergone definite training for his profession." The committee recommends that professional training should consist of a period spent in a school recognized for the purpose, where a teacher—

would at first employ his time in observing the methods of skilled teachers, and studying the scheme of work and the elements of his art, and would thus gradually come to understand the principles he was to follow and the difficulties he would have to meet. After a sufficient period of initiation he might begin to teach under supervision, receiving frequent advice and practical hints; and before his period of training was over, he might begin to run alone.

The committee accepts the conclusions of the Modern Language Association that qualified British teachers are superior to foreign teachers, partly because the latter are found less effective for discipline and for the exercise of a salutary influence over the pupils, partly because the training of foreign students has tended to give them an "excessive philological and antiquarian bias," and chiefly because "it is natural to suppose that the studies themselves will be more successfully presented to the classes by teachers who approach them from the British point of view." Foreign exchange assistants, however, are a most valuable supplement.

But "the universities are the keystone of the whole structure of higher education." At present the arrangements as to staff, equipment, and expenditure for modern languages are defective in the British universities. The committee urges that action should be taken by Parliament to adopt a policy embodying—

a scheme providing for the establishment, within 10 years from the conclusion of the war, in addition to all the posts that already exist and those that may be founded by private or local initiative, of, say, 55 first-class professorships—15 of French studies, and 10 each for the studies concerned with the four other principal countries of Europe—and double that number of lectureships.

Such a scheme must be accompanied by a considerable increase in the number of scholarships for entrance to the universities and post-graduate studies. In 1911-12 only 8 out of 440 entrance scholarships at Oxford and Cambridge were awarded to modern languages. Assistance should also be afforded to students to spend some time abroad.

In addition to organized study in secondary schools and universities the report emphasizes the importance of providing facilities for the study of modern languages in later life, especially for those who discover the need of such knowledge for commerce or industry. The

local authorities are urged to extend the provisions already made in evening classes by the organization of other part-time and even brief whole-time study. But the pursuit of such study can only be stimulated if adequate pay and prospects are held out for specialization, a condition not prevailing at present.

For the specialist in modern language teaching the sections on method and examinations will prove of particular interest, especially the carefully elaborated consideration of the merits and limitations of the direct method, of the importance of oral tests, and of the place of translation from English into the foreign tongue. The report contains a summary of conclusions and recommendations, an appendix on the hours of work, salaries, and pensions in a number of foreign countries, and a letter from 31 professors and readers of modern languages in British universities representing their views on the subject of the committee's reference. The report represents the substantial consensus of the whole committee; the exceptions are certain reservations on the questions of the educational value of French and Latin, compulsory Latin at the university, languages in the first school examination, modern sides, the age at which foreign languages should be begun, preparatory schools, and the classification of schools. The report will, like the corresponding report on the position of natural science, exercise an important influence on the development of higher education in Great Britain. The general position of the committee may well be summarized in its own words:

The due advance of modern studies appears to us to require in the first place a change of spirit. We do not underrate, we may even be held by some to have unduly emphasized, the practical value of modern studies as affecting the material fortunes of the Nation, its classes, and its individual citizens. But no department of knowledge can obtain its highest development unless it be inspired by an ideal. That ideal of humane learning concerned with the thought, the life, the achievements, the psychology, in fact, the entire history of modern nations, we have endeavored to indicate and define; and we have found an encouraging example in the highest results attained during many centuries by the culture based on the records of ancient civilization. What has been done through the study of the dead people of Greece and Rome, can be done, we conceive, through the study of the living peoples of the habitable globe in proportion to their several contributions to the art of living. Modern studies must for such purposes be pursued with like intensity of purpose, with like faith and sympathy, with like seriousness and accuracy, and a like ideal of scholarship.

TENDENCIES IN SECONDARY EDUCATION.

EDUCATIONAL OPPORTUNITIES.

The education act gives no special treatment or attention to secondary education. Local authorities are encouraged to devote more money to higher education by the removal of the existing restriction on the amount that can be levied from the local rates, and the law

specifically requires that "adequate provision shall be made in order to secure that children and young persons shall not be debarred from receiving the benefits of any form of education by which they are capable of profiting, through inability to pay fees." Although the law does not require the establishment of secondary schools, the Board of Education is empowered to withhold its refusal of schemes submitted by local education authorities unless they make adequate provisions for education in the area as a whole. Indirectly, therefore, considerable pressure will be brought to bear to increase the opportunities for higher education that are at present limited. The question of free secondary education was not entirely lost sight of, and it was proposed, during the course of the debate on the Fisher bill, that fees be abolished in State-aided secondary schools. The proposal did not meet with much response. Mr. Fisher pointed out that 67 per cent of the pupils in the State-aided schools had come from the public elementary schools; instead of abolishing fees and losing \$5,000,000 of revenue, it was wiser to encourage local education authorities to provide more secondary schools, to apply for more State grants, and as a natural consequence to provide more free places in such schools. The legal requirement quoted above would insure that no pupil of ability would be deprived of his opportunity of securing a higher education.

No action has accordingly been taken by the State to secure the establishment of free secondary education as a part of the national system. There is, however, a pronounced body of opinion throughout the country in favor of free higher education for those who have the ability to profit by it. The British Labor Party had something of this kind in mind when they demanded in their program public provision "for the education alike of children, of adolescents, and of adults, in which the Labor Party demands a genuine equality of opportunity, overcoming all differences of material circumstances." The Workers' Educational Association adopted the following resolutions on full-time secondary education as part of their program for educational reconstruction:

That all children admitted to a secondary school should have reached an approved standard of education, the ground of transfer being the fitness of the scholar for the broader curriculum.

That free provision should be made for all who are eligible and desirous to enter such schools, such provisions to include a satisfactory maintenance allowance where necessary.

That the number of secondary schools of varying types should be largely increased, and that the curriculum be made more variable to meet the interests of individual scholars.

The sense of the Education Reform Council, a large and representative body appointed at the instance of the Teachers' Guild, was that

scholarships and free places "should be provided in such numbers as will admit to secondary schools those pupils from elementary or preparatory schools who can profitably undertake a full secondary course." It also urged that "the number of efficient secondary schools of varying types should be increased," a view shared by the Incorporated Association of Headmasters, which declared in its educational policy that "there should be a considerable increase in the number of secondary schools, i. e., schools which provide some form of whole-time general education as distinct from technical training up to the age of 18." The Incorporated Association of Assistant Masters in Secondary Schools also declared it to be part of its educational policy that "no child who has shown capacity to profit by a course of secondary education should be refused admission to the schools, even if the child has to be fed and clothed at the public expense to enable him to attend." This view was slightly expanded in the educational policy of the National Association of Education Officers, who declared "that no child who is qualified to receive secondary, technical, or university education should be debarred therefrom for financial reasons." Finally, the Teachers' Registration Council supported "the principle of abolishing fees in secondary schools for the maintenance of which a local education authority is responsible, and also the principle of a due number of free places in secondary schools which are partly maintained by State grants."

The Athenaeum and the Times Educational Supplement went beyond this program and urged the establishment of a system of universal free secondary education based on a common elementary education. The common basis would continue up to the age of 11 or 12 and would be followed by a general secondary education adapted to individual ability and interests up to 15 and 16. It is hardly probable that these proposals will take concrete shape for some time. The principle that differentiation should take place at the age of 11 or 12 is very generally accepted and is undoubtedly the age that will be universally adopted. The accomplishments of an elementary school or its equivalent up to that age will become the basis upon which will be developed the advanced work in the upper grades and the central schools required by the act and the lower secondary school courses.

It may be generally assumed that the opportunities that are demanded will be extended and increased in public and other State-aided schools. In addition to these schools there has been a supply of private schools ranging all the way from the great public schools and other endowed schools to their private venture or proprietary school. At the present time neither the Board of Education nor any other authority knows the extent of this supply. Under the

new act, however, the board is now empowered to secure a description of all schools "in order that full information may be available as to the provision for education and the use made of such provision in England and Wales." Together with local education authorities the board may inspect schools that desire to be recognized as efficient for certain purposes. The Teachers' Registration Council will also affect the status of private schools indirectly in so far as a teacher's eligibility to be registered will depend in part on the character of the schools in which he has served. Further, private schools will be subjected to severe competition for various reasons; the schools established by local education authorities will command more money from the State and their localities; such schools will offer higher salaries and pensions to teachers; the board will grant additional aid to the larger schools for advanced courses; and, finally, it is proposed that there shall be some differentiation between public and private schools in the certificates awarded as a result of the secondary schools examinations. On the other hand, the influence of competition, inspection, and some public supervision may well stimulate the private schools to take a very real place in the national system. The private schools have always played an important part in English education, and, if they have not fully measured up to the claims of those who have favored their existence on the ground that they serve as experimental stations, they have furnished opportunities for secondary education that would otherwise not have been available. Many will disappear under the full light of publicity, but many others may win a new place for themselves as the result of the revived interest in education.

THE MEANING OF A LIBERAL EDUCATION.

Complete unanimity prevails on the broad question of the function of secondary education. The opportunities will undoubtedly be democratized, and access to the secondary school will become more ready. There is no intention, however, to confuse the functions of secondary education by introducing into it elements of technical and vocational training. Those who charge the European secondary school with being the haven of aristocracy would be somewhat astonished to find liberal and conservative, democrat and aristocrat, employee and employer united in complete agreement on the principle that "a secondary school exists to provide a liberal training, and it is no part of its task to furnish specific or technical instruction in the rudiments of professional studies or commercial routine." (Schoolmasters' Yearbook, 1918.) The Workers' Educational Association expresses the same view in its resolutions:

That the requirements of a liberal education should be regarded as paramount in the organization of every type of secondary school.

That in the interests alike of education and of economic efficiency a sound general education in childhood and adolescence is the necessary foundation for any specialized course of technical or professional training, both in town and country, and that therefore a technical education should be regarded as supplementary to secondary education.

The Incorporated Association of Headmasters urges that:

The essential characteristic of post-elementary education should be the development of various types of schools so as to give the best possible chance to the most varied kinds of ability. The one common feature must be that the aim is primarily educational—the harmonious development of the mental, moral, and physical powers. The imparting of the technical elements of a trade is not in itself an education, but to say this is not to deny that a great deal of the knowledge that lies at the foundation of every sort of trade and practical pursuit can be and ought to be laid under contribution for the building up of various sorts of educational courses.

The functions of liberal and technical education are thus clearly separated. Before entering upon a discussion of the meaning and content of a liberal education, the general aim of secondary education that a liberal education is to promote may be considered. Again it is illuminating to quote current English thought. The Schoolmasters' Yearbook, 1918, thus describes the purposes of secondary schools:

They have to foster learning as a necessary element in life, and this they do by giving instruction which aids the pupil in his efforts to understand the things about him. To realize this purpose the schools need a wide curriculum. Literature, science, mathematics, art, and practical work all have their place, since each in its own sphere helps to cultivate that power of interpreting life which is the result of sound education.

Similarly the Athenæum in endeavoring to combat what appeared to it and many others efforts on the part of employers united into a Federation of British Industries to direct education into vocational channels, sums up the needs of the day as follows (Mar., 1918):

But man can not live by bread alone. He is a member of a family, a trade-union, a club, a city, a nation, a church. He is a human personality, with something more than a pair of hands condemned to toil at the will of another. He has intellectual and esthetic taste (only too often cramped and undeveloped) and moral principles. He believes in liberty, justice, and public right, and goes to give his life for these things. The worker is much more than a worker; he is a citizen. And every citizen, regardless of his social position or wealth, has claims which are prior even to the claims of industry itself—claims of opportunities to enable him to fulfill his manifold responsibilities as a producer, as a member of various social groups from the family to the State. His responsibilities are no less if he be a ship's riveter than if he were a ship-builder. The engine fireman is no less a citizen than the railway director or the railway shareholder.

The detailed definition of the content that should make up a liberal education depends on these points of view. Democracy will make more and more demands on the intelligence of its citizens, both as

individuals and as members of society. The school should prolong rather than restrict the opportunities for that general education that is the foundation of the well-being of man as an individual and as a citizen. Those who look into the future see that for the working classes a new era is opening up in which more leisure will be provided; it should be one of the functions of education to train for the enjoyment of that leisure. Further, the extension of the franchise will require a more general dissemination of education than hitherto. There is also a genuine and sincere belief that technical and vocational training will be improved if based on a broad general education, a belief that is shared both by teachers and specialists alike. Industrial and commercial success and progress, it is felt, will depend on well-trained and well-educated leaders rather than on the early specialization of boys and girls. Finally, it is not improbable that • the importance of vocational training for the masses of industrial workers may be proved by the experience with such training during the war to have been exaggerated.

The question of educational values was raised soon after the outbreak of the war and discussion was bandied to and fro on the merits of this subject or that, now classics, now the sciences, and from time to time modern languages. For a time it seemed that no advantages could be claimed for one subject without disparaging another. It was many months before it was recognized that the problem involved was much broader than that of the value of this subject or that, and that no settlement could be obtained unless the larger view were taken and the question approached from the standpoint of the needs of the boy or girl to be educated. If any progress was to be made, the curriculum as a whole must be subjected to critical evaluation. This stage was not reached until the middle of 1916.

On February 2, 1916, a letter on the neglect of science, signed by a large number of eminent scientists, appeared in the Times. It was pointed out that the country had suffered checks during the war through lack of scientific knowledge among administrative officials, statesmen, and civil servants, and leaders in public and industrial life. In the history of the British Government Lord Playfair was the only scientist to become a cabinet minister. In general there was not enough knowledge of science to give an intelligent respect for it. Scientific method and scientific habit of mind would be essential to success in the period of reconstruction. At present science "does not pay" in most examinations, and few leaders in education are scientists. If science were assigned a greater value in the civil-service examinations, the subject would rise into its proper position and gain the respect necessary for national welfare. "Our desire is to draw attention to this matter, not in the interests of existing professional

men of science, but as a reform which is vital to the continued existence of this country as a great power." A meeting was held in London on May 3, 1916, at which resolutions were passed urging increased attention to science in educational institutions.

On the day following this meeting, May 4, 1916, a number of eminent men of letters and scientists issued a letter on "Educational Aims and Methods," urging the claims of humanities. They pointed out the danger that results of a war in which material means and technical skill are essential might be misleading.

If in our reforms we fix our eyes only on material ends, we may foster among ourselves that very spirit against which we are fighting to-day * * *. Technical knowledge is essential to our industrial prosperity and national safety; but education should be nothing less than a preparation for the whole of life.

It is essential, therefore, to consider carefully the effect of sweeping changes proposed at a time of great stress. The purpose of education is broader than preparation for a vocation.

It should introduce the future citizens of the community, not merely to the physical structure of the world in which they live, but also to the deeper interests and problems of politics, thought, and human life. It should acquaint them, so far as may be, with the capacities and ideals of mankind, as expressed in literature and art, with its ambitions and achievements as recorded in history, and with the nature and laws of the world as interpreted by science, philosophy, and religion. If we neglect physical science, we shall have a very imperfect knowledge of the world around us; but if we ignore or subordinate the other elements of knowledge, we shall cut ourselves off from aspects of life of even greater importance. Even physical science will suffer. Some of its most distinguished representatives have strongly insisted that early specialization is injurious to the interests they have at heart, and that the best preparation for scientific pursuits is a general training which includes some study of language, literature, and history. Such a training gives width of view and flexibility of intellect. Industry and commerce will be most successfully pursued by men whose education has stimulated their imagination and widened their sympathies.

A belief in intellectual training is more important than physical science, while scientific method is necessary not only in science proper but in all branches of education. The whole of civilization is rooted in the classics and can not be neglected by those who are interested in literature or government. "Greece and Rome afford us unique instances, the one of creative and critical intelligence, the other of constructive statesmanship." In the closing paragraph of the letter a way was opened for securing cooperation and harmony on the larger question of the meaning of a liberal education:

In urging this we do not commit ourselves to defending the present system of classical education in all its details. Still less do we claim for it any artificial privilege. We cordially sympathize with the desire to strengthen the teaching of modern history, of modern languages, and of the literature of our own country. Further, we fully accept the importance of promoting scientific re-

search, or extending scientific instruction in schools where it is still inadequately provided, and of improving the quality of science teaching; and we desire to cooperate with the representatives of these studies in insuring them a due place in our national education. At the same time we would point out that much criticism of our schools seems directed against a past state of things and ignores reforms which have been already effected. It is sometimes forgotten that the teaching of physical science is compulsory in all State-aided secondary schools, that of Latin, and of course of Greek, in none.

In the following month, at the suggestion of the Historical Association, the principal organizations representing humanistic studies—the Classical, English, Geographical, Historical, and Modern Language Associations—held a conference in Manchester, at which the following resolutions were passed:

(i) It is essential that any reorganization of our educational system should make adequate provision for both humanistic and scientific studies.

(ii) Premature specialization on any one particular group of studies, whether humanistic or scientific, to the exclusion of all others, is a serious danger, not only to education generally but to the studies concerned.

(iii) Humanistic education implies the adequate study of language and literature, geography, and history, which in each case should, at the appropriate stage of education, go beyond the pupils' own language and country.

(iv) The representatives of humanistic studies would welcome from the representatives of the mathematical and natural sciences a statement with regard to those studies similar to that contained in (iii).

(v) In all reform of education it must never be forgotten that the first object is the training of human beings in mind and character, as citizens of a free country, and that any technical preparation of boys and girls for a particular profession, occupation, or work must be consistent with this principle.

(vi) Subject to the above principles the associations concerned would welcome a comprehensive revision of national education from the point of view of present needs.

In response to this resolution the committee of the Association of Public School Science Masters, in October, expressed their agreement with the principles stated at the conference and sent the accompanying statement:

Natural science in education should not displace the "humanistic" studies, but should be complementary to them. In this capacity natural science meets two needs in particular:

1. *Search for truth.*—Imaginative power indicates new fields in which further knowledge of truth may be revealed; its subsequent establishment depends on accurate observation, with constant recourse to nature for confirmation. The one aim of natural science is, in fact, the search for truth based on evidence rather than on authority. Hence the study of the subject implies accurate observation and description and fosters a love of truth. The special value of natural science in the training of mind and character lies in the fact that the history of the subject is a plain record of the search for truth for its own sake.

2. *Utility.*—There are certain facts and ideas in the world of natural science with which it is essential that every educated man should be familiar. A knowledge of these facts assists men (a) to understand how the forces of nature may be employed for the benefit of mankind, (b) to appreciate the sequence of

cause and effect in governing their own lives, and (c) to see things as they really are, and not to distort them into what they may wish them to be. It is the business of natural science in education to bring this knowledge within the range of all.

This was followed by a letter in November from the Mathematical Association to the effect that:

The teaching committee of the Mathematical Association concurs with the Councils of the Classical, English, Geographical, Historical, and Modern Language Associations in the view that any reorganization of our educational system should make adequate provision for both humanistic and scientific studies; that premature specialization should be avoided; and that technical preparation for a particular profession should be conceived in such a spirit that it misses none of the essentials of a liberal education.

In reply to the invitation of the representative conference to make a statement as to the position of mathematical studies in schools, the Mathematical Association committee would submit that from a school course of mathematics the pupil should acquire—(1) an elementary knowledge of the properties of number and space; (2) a certain command of the methods by which such knowledge is reached and established, together with facility in applying mathematical knowledge to the problems of the laboratory and the workshop; (3) valuable habits of precise thought and expression; (4) some understanding of the part played by mathematics in industry and the practical arts, as an instrument of discovery in the sciences, and as a means of social organization and progress; (5) some appreciation of organized abstract thought as one of the highest and most fruitful forms of intellectual activity.

In the course of the autumn of 1916 a Council for Humanistic Studies was formed representing the British Academy and the five associations mentioned above. The council entered into communications with organizations representing natural science—the joint board of scientific studies of the Royal Society and a committee on the neglect of science for the purpose of arriving at a common basis for future action. As the result of a conference between the council and the joint board, the following resolutions were passed in January, 1917:

1. The first object in education is the training of human beings in mind and character, as citizens of a free country, and any technical preparation of boys and girls for a particular profession, occupation, or work must be consistent with this principle.

2. In all schools in which education is normally continued up to or beyond the age of 16, and in other schools so far as circumstances permit, the curriculum up to about the age of 16 should be general and not specialized; and in this curriculum there should be integrally represented English (language and literature), languages and literatures other than English, history, geography, mathematics, natural sciences, art, and manual training.

3. In the opinion of this conference, both natural science and literary subjects should be taught to all pupils below the age of 16.

4. In the case of students who stay at school beyond the age of 16, specialization should be gradual and not complete.

5. In many schools of the older type more time is needed for instruction in natural science; and this time can often be obtained by economy in the time allotted to classics, without detriment to the interests of classical education.

6. In many other schools more time is needed for instruction in languages, history, and geography; and it is essential, in the interests of sound education, that this time be provided.

7. While it is probably impossible to provide instruction in both Latin and Greek in all secondary schools, provision should be made in every area for teaching in these subjects, so that every boy and girl who is qualified to profit from them shall have the opportunity of receiving adequate instruction in them.

Subject to a few verbal amendments proposed by the executive committee of the joint board, these resolutions represent the present settlement of the function of the secondary school. In the words of a report¹ issued by Sir Frederic G. Kenyon on behalf of the Council for Humanistic Studies:

It is not a little that the organizations which represent all the principal subjects of education, whether scientific or humanistic, should agree in deprecating early specialization, and should recognize the importance of opening the doors of all subjects to all pupils, and of facilitating their entrance into the paths most suitable for them. * * * All alike deprecate the conduct of education in a commercial spirit, and declare their faith in a liberal education as the foundation for all activities of mind and spirit in a civilized country.

A comparison of the above resolutions with the program laid down for secondary schools by the Board of Education (see p. 29) will indicate how closely these discussions represent the requirements of current practice. The effect of these discussions, together with the reports of the committees on the position of natural science and on the position of modern languages, will be to give greater reality to all the subjects in the schools and to build up a body of public opinion that will insist on their equal recognition. All the proposals for educational reconstruction that deal with secondary education concur with these resolutions which now represent the deliberate opinion of leaders in each of the subjects recommended, of statesmen, professional men, and men of affairs. The great task still remains of securing the teachers educated and trained for the new duties laid upon the schools. The activities and progress of the Teachers' Registration Council and the Government inquiry into the whole question of salaries are of great promise for the future status of the teachers. The future has still before it the consideration of the appropriate kind of training that must be devised.

The aim of the secondary school is to impart a liberal education, the scope of which is now defined and permits such flexibility as is demanded by the needs and capacities of the individual. A general education will be provided for pupils between the ages of 12 and 16, and specialization will be based on this foundation. These will be incorporated in the university and other examinations, and the equal recognition of the subjects included in the resolutions will be pro-

¹ Kenyon, Sir Frederic G. *Education, Scientific and Humane*. (London, 1917.)

moted in the reconstituted examinations for the higher branches of the Civil Service.¹ There will be removed from the secondary schools that reproach to which the Education Reform Council drew attention in its report:

At the same time they are convinced that in the general system of these schools the interests of the many have hitherto been largely sacrificed to the special culture of the clever few, and that generally speaking the esthetic, observational, manual, and even literary elements of education have been starved to provide for an excessive and wasteful, because premature and inappropriately methodized, attention to foreign languages, especially Latin.

It is now clearly established and accepted after a struggle of nearly 300 years that classical monopoly is incompatible with the extension of educational opportunities. More secondary schools and easier access to them inevitably demand a broader definition of a liberal education than has hitherto prevailed, and such an education to be democratic must be subject to adaptation to the abilities and interests of the individuals who are to enjoy it. Referring to their regulations for secondary schools the Board of Education state that they—

allow and encourage much elasticity in curricula, subject only to the fundamental principle that the school course make effective provision for the development of bodily and mental faculties on broad and human lines in the pupils who will be the citizens of the future.

It remains for the future to prove whether England, in thus building her hopes on a broad, liberal education and on a curriculum humanized in all its branches and in defying the demands of her materialists who in the name of patriotism are urging vocational education, is destined to be proved right or wrong. The upbuilding after the war—

is to be economic as well as spiritual, but those who think out most deeply the need of the economic situation are most surely convinced that the problems of industry and commerce are at the bottom human problems and can not find solution without a new sense of "cooperation and brotherliness."²

SALARIES AND PENSIONS.

SALARIES OF ELEMENTARY SCHOOL-TEACHERS.³

The problem of maintaining an adequate supply of elementary-school teachers was already becoming serious in England and Wales before the war; the outbreak of the war and its continued duration have only served to intensify the crisis. A large proportion of the

¹ See Report of the Treasury Committee on Civil Service, Class I, Examination. (Cd. 8657, 1917.)

² Paton, J. L. *The Aim of Educational Reform*; in Benson, A. C., *Cambridge Essays on Education* (Cambridge, 1918).

³ A portion of this section appeared in *School and Society*, Vol. VII, pp. 773ff, and is here reprinted by the courtesy of the editor.

men had joined the army, and many women had been attracted to occupations which appeared to be more obviously connected with the war activities and to offer higher remuneration than teaching.

At the same time the war imposed additional burdens, willingly assumed but none the less demanding sacrifices, on the teachers; these took the form of larger classes, extra work in the school, voluntary war work of different kinds, and so on. Not the least of the hardships was the depreciation of salaries due to the rising cost of living which by 1917 had increased about 80 per cent above that of 1914. Education authorities were confronted with several problems—inability to retain teachers in the face of more attractive opportunities elsewhere, inability to secure an adequate supply of candidates ready to undertake several years of training at a time when remunerative occupations were open to them without training, and inability to find additional resources when the public purse was otherwise being drained to meet other demands.

The first response was to grant bonuses on salary, which never went beyond an annual addition of 10 per cent, and rarely affected salaries above \$1,000 or \$1,250 a year. Such increases were of course quite incommensurate with the needs of the time, especially when skilled workmen could command as much as \$75 a week, and boys still under 18 about \$15 a week for unskilled services.

In only one important respect was the stringency relieved by a Government prohibition against the increase of rents. The bonus system prevailed until about the middle of 1917, when the Government came to the rescue with an addition to the educational budget of about \$18,000,000, which was specially earmarked for salaries. At the same time the Board of Education issued a minute recommending that the minimum salary for women teachers in elementary schools should be \$450 and for men teachers \$500. The effect of the additional Government grant was to stimulate the establishment of new scales of salary.

In the meantime the Government had, in June, 1917, appointed a departmental committee to inquire into the principles which should determine the construction of scales of salary for teachers in elementary schools, and another committee to make a similar inquiry into the salaries of secondary school teachers. The first committee issued its report in February, 1918.¹ The report is based on three main principles:

1. That "authorities, in constructing a scale should aim at obtaining a constant supply of suitable recruits, at retaining them while other careers are

¹ Report of the Departmental Committee for Inquiring into the Principles which should determine the Construction of Scales of Salary for Teachers in Elementary Schools, Vol. I, Report Cd. 8939; Vol. II, Summaries of Evidence and Memoranda, Cd. 8999. (London, 1918.)

still open to them, and at securing service of the desired quality from those who make teaching their life work."

2. That the scale "shall provide them with a reasonable assurance of a remuneration that will enable them to live appropriately without embarrassment, and that they may have a fair chance of advancement to posts of greater importance and emolument."

3. That "as authorities, in framing their scales are taking part in the work of establishing the teaching service of the country on a basis conducive to the efficiency of the system of national education, they should proceed upon a common basis of principles."

The committee, while accepting the administrative advantages of a salary scale, recognized that special consideration must be given to rewarding teachers of exceptional ability, to dealing with teachers who drift into a rut, to withholding increments from those teachers who are reported to be inefficient. It further considered the question of equal pay for men and women, for which a strong agitation has been launched by women teachers throughout the country. Finally, attention was given to removing some of the inequalities in salaries paid to teachers in rural and urban areas.

The chief principle adopted for the construction of salary scales was that a scale with smaller increments for the early years of service, followed by larger increments leading up to a salary adequate for increasing family responsibilities, and then with further prospects until retirement, is superior to a sharp, steep scale leading early up to a maximum, or a long and gradual scale which would not yield an adequate salary when responsibilities were greatest. For example, in the case of men certificated teachers annual increments are suggested for not less than 12 years, followed by increments at intervals of not more than 3 years for a further period of about 10 years, and for women certificated teachers annual increments for not less than 8 years, followed by increments at longer intervals as in the case of men. Uncertificated teachers should have a short scale covering a period of 4 to 6 years and not rising above the minimum for women certificated teachers, with discretionary increments in cases of individual merit.

Owing to the opposition of the teaching body, the committee was unable to recommend that increments should depend solely upon merit, and suggested that increments be automatic except in the case of definite default or willful neglect, with additional rewards for exceptional merit. The committee was unable to accept the principle of equal pay for men and women, partly because a scale of salaries adequate for women is under present circumstances inadequate for men, and partly because it is essential to attract and retain suitable men in the profession. Accordingly, it advocated the principle that the minimum salaries for both men and women should be approxi-

mately the same, but that the maximum for women should not be less than three-fourths of the maximum for men.

With reference to rural and urban teachers the committee was of the opinion that service in the rural districts should be made financially attractive and that accordingly salaries should be only a little lower than in urban areas. While the committee did not attempt to establish a national scale, it offered for consideration a number of illustrative scales, and emphasized the importance of avoiding such diversity that the larger school systems would draw teachers away from the smaller.

The following illustrations of scale making for certificated teachers were offered:

Men.—(1) Minimum \$500, rising by annual increments of \$25 to \$800 in the thirteenth year of service, and then by triennial increments of \$50 to \$950 in the twenty-second year of service.

(2) Minimum \$500, rising by annual increments of \$25 to \$700 in the ninth year of service, and then by annual increments of \$50 to \$900 in the thirteenth year of service, and then by triennial increments of \$50 to \$1,050 in the twenty-second year of service.

(3) Minimum \$500, rising by annual increments of \$25 to \$575 in the fourth year of service, then by annual increments of \$50 to \$1,050 in the fourteenth year of service, and then by triennial increments of \$50 to \$1,200 in the twenty-third year of service.

(4) Minimum \$500, rising by annual increments of \$25 to \$600 in the fifth year of service, then by annual increments of \$50 to \$1,150 in the sixteenth year of service, and then by triennial increments.

(5) Minimum \$500, rising by annual increments of \$50 to \$1,200 in the sixteenth year of service, and then by triennial increments of \$100 to \$1,500 in the twenty-fifth year of service.

Women.—(1) Minimum \$450, rising by annual increments of \$25 to \$650 in the ninth year of service, and then by triennial increments of \$50 to \$750 in the thirteenth year of service.

(2) Minimum \$450, rising as in (1) to \$650 in the ninth year of service, and then by one increment to \$700 in the tenth year of service, and then by triennial increments to \$850 in the nineteenth year of service.

(3) Minimum \$450, rising by annual increments of \$25 to \$600 in the seventh year of service, then by annual increments of \$50 to \$750 in the tenth year of service, and then by triennial increments of \$50 to \$900 in the nineteenth year of service.

(4) Minimum \$450, rising by annual increments of \$25 to \$550 in the fifth year of service, and then by annual increments of \$50 to \$750 in the eleventh year of service, and then by triennial increments of \$50 to \$1,000 in the twentieth year of service.

(5) Minimum \$450, rising as in (4) to \$550, then by annual increments of \$50 to \$900 in the twelfth year of service, and then by triennial increments of \$100 to \$1,200 in the twenty-first year of service.

The existing situation is indicated in a return on teachers' salaries in public elementary schools issued by the Board of Education in 1917. Of 36,827 certificated men teachers, only 18,332 were receiving salaries over \$750 a year, while 7,040 received over \$1,000 a year,

2,066 of over \$1,250 a year, and only 1,866 over \$1,500 a year; 2,629 received less than the minimum of \$500 a year prescribed for men. Of 77,189 certificated women teachers, 17,832 received less than the minimum of \$450 prescribed, and 32,314 less than \$500 a year, while 20,573 received more than \$600 a year, 7,603 over \$750, and only 1,269 were in receipt of more than \$1,000 a year. The certificated teachers represent the highest paid elementary school teachers. The situation is much worse in the case of uncertificated teachers, for of 3,546 men, only 128 received more than \$500 a year, and of 35,979 women only 39 received more than this sum. The proposals contained in the present report will, if carried into practice, not only raise the minimum salaries considerably above the present minimum rates, but will offer teachers the prospect of a maximum of more than twice the present average. To these prospects must be added the benefits of the superannuation act of 1918.

SALARIES FOR SECONDARY SCHOOL TEACHERS.

The inadequacy of salaries paid to teachers in secondary and other schools of similar grade led in 1917 to the appointment of a departmental committee—

To inquire into the principles which should determine the fixing of salaries for teachers in secondary and technical schools, schools of art, training colleges, and other institutions for higher education (other than university institutions), due regard being had to such differentiation in respect of locality, duties, qualifications, sex, and other relevant circumstances as is consistent with or necessary for the organization of teaching service throughout the country on a system conducive to the efficiency of national education.

The commission, under the chairmanship of Sir H. L. Stephen, after taking the evidence of officials of the Board of Education and local education authorities, and of teachers and their associations, issued its report¹ in 1918. The report considers the character of the different types of institutions involved, discusses the principles determining the fixing of salaries, and includes a memorandum on the institutions falling within the terms of reference. The chief part of the report is devoted to a discussion of salaries in secondary schools. The salary question assumes particular importance at a time when there is urgent need for attracting and developing a strong teaching force. In spite of the fact that the institutions considered represent a great degree of variation in sources of maintenance and character of government, national standards must be maintained. "A national system of education may be indefinitely divided and subdivided; but it must always be regarded as an organic unity the

¹ Report of the departmental committee for inquiring into the principles which should determine the fixing of salaries for teachers in secondary and technical schools, schools of art, training colleges, and other institutions for higher education (other than university institutions), Cd. 9140. Summaries of Evidence, Cd. 9168. (London, 1918.)

welfare of which depends upon the welfare of every recognizable division or subdivision." The increasing competition with commerce, industry, and the public services, all of which offer better opportunities than the teaching profession, which at present holds out prizes only for the few, renders the need of providing attractive inducements to prospective candidates more urgent than ever. At present, in the secondary schools that come under the survey of the Board of Education, only 460 out of the 1,050 institutions have established scales of salary. The majority of the 460 schools are under public authorities, thus leaving a vast number of small endowed and private schools with inadequate provisions for the financial welfare of teachers.

The advantages of scales of salaries outweigh any disadvantages that they may involve. A scale assures to the teachers certain financial prospects and defines the liabilities of the school authorities. It relieves teachers of the perpetual anxiety of financial embarrassment, while securing a larger and better supply of candidates. The chief disadvantages, such as the unfairness of treating all teachers alike, and the lack of stimulus for the exceptionally able, can be offset by introducing elasticity in the administration of the scale and establishing posts of responsibility. In order to secure as homogeneous a body of teachers as possible for any one branch of education, possessing similar qualifications, academic and professional, a national scale would be the ideal to be attained. In view of the great variations in the organization and administration of schools, the commission was not able to advocate a national scale. The units of scales must necessarily remain the same, some applying only to a single school, others to all the schools maintained by a local authority. A national scale prescribed by a central authority would be inconsistent with existing arrangements. The imposition of a national scale is impossible without a national guarantee, which the commission was not empowered to discuss. Of three plans suggested, namely, (1) the prescription of a complete scale with initial salary, increments, and maximum; (2) the establishment of a minimum initial salary with a minimum to be reached at one point at least later in the scale; and (3) the prescription of only a minimum salary, the commission selected and advocated the second. This plan the commission considers will provide a certain common measure among all scales, leaving local units to frame such steps on the scale and to provide such maxima as suit their circumstances. There is very little doubt that this recommendation will not be considered satisfactory, and it may be pointed out that the commission's suggestion was contrary to the opinions presented to it, for "most of the witnesses who have appeared before us, and have considered this matter, are in favor of such

a scale (national) being introduced in all secondary schools that receive public money."

In dealing with the question of equal pay for both sexes, for which justification may be found by some in the requirement of similar qualifications and efficiency from both men and women teachers, and in the fact that needs of both may be the same in meeting certain personal obligations, in providing for leisure and self-improvement, and in saving for old age, the commission is of the opinion that there must be differentiation of scales on the basis of sex. At present "a salary that will attract a woman will not necessarily attract a man of similar qualifications." Since salaries must be sufficiently high to attract and retain the services of qualified teachers, the fact must be taken into consideration that there are more openings in commerce and industry, and in the professional and public services for men than for women, that as a general rule men are likely to give longer service, and that, while the prospect of marriage may be the same for both sexes marriage for the man implies the assumption of new financial responsibilities. The commission considers that "under present economic and social conditions the principle of equality of pay for the two sexes would lead to the one being underpaid or the other overpaid." It is accordingly suggested that scales of salary should be approximately the same in the initial stages for both men and women, but that differences imposed by differences of economic and social status should be introduced at later stages.

The construction of scales of salary gives rise to the question of their length and the frequency of increments. A national scale should imply a minimum initial salary rising by annual increments to a substantial salary at the age of 32 or 33, and a maximum at the age of 42 or 43. It is also suggested that at some intermediate point in a scale there should be another minimum that can be attained by most teachers. A review of past services is recommended before teachers are advanced to the highest point of a scale. The initial salary should not be so high as to render the maximum unattractive, and the maximum should be attainable at an age when it will serve to retain experienced teachers, and leave them some years for its enjoyment. The increments should be granted automatically, subject to satisfactory service and conduct. Where an increment is withheld, a teacher should be informed of the cause and be given an opportunity to defend himself. In order to meet cases of special ability, whether in teaching or administration, scales should be sufficiently elastic to enable authorities to offer suitable financial recognition of special merit. Additional salaries must be provided for assistant principals and heads of departments. Another element of flexibility that it may be desirable to consider may arise out of

differences in local conditions in such matters as the cost of living and rents. Other differentiations that will necessarily arise under existing conditions may follow from differences in academic and professional training and length of experience. The commission holds that for appointment in a secondary school a university degree and one year of professional training are essential. Other matters, such as differentiation on the basis of the subject taught, or the character or size of a school, should not, in the opinion of the commission, lead to variation in scales. So far as possible, in the interests of national education, differences between different schools in the establishment of salary scales should be eliminated. The commission strongly urges the more general establishment of "grace terms" or leave of absence on full pay, for purposes of study or research, without affecting the continuity of the scales or the future prospects of teachers.

These recommendations are not intended to apply to the salaries of principals. For these, personal scales reaching a high maximum within a short time should be established. Here the size of the school and character of the work to be done should be taken into consideration. The commission wisely deprecates the practice of paying principals by capitation fees and the system by which principals or assistants make a profit by taking boarders.

The standards advocated for the establishment of salary scales for secondary school teachers are also recommended for the other institutions that come within the terms of reference, in so far as the same qualifications are needed as in the secondary schools. Where special factors, such as competition with opportunities in commerce and industry in the case of certain teachers in technical and art schools, must be taken into account, personal scales are advocated.

The following is an illustrative scale for assistant masters in secondary schools:

Salaries of assistant masters in secondary schools.

Years of service for the purposes of the scale.	Approximate age.	Salary.	Years of service for the purposes of the scale.	Approximate age.	Salary.
1.....	22-23	\$900	14.....	35-36	\$1,725
2.....	23-24	950	15.....	36-37	1,800
3.....	24-25	1,000	16.....	37-38	1,875
4.....	25-26	1,050	17.....	38-39	1,950
5.....	26-27	1,100	18.....	39-40	2,025
6.....	27-28	1,150	19.....	40-41	2,100
7.....	28-29	1,200	20.....	41-42	2,175
8.....	29-30	1,275	21.....	42-43	2,250
9.....	30-31	1,350	22-28.....	43-60	At maximum.
10.....	31-32	1,425			
11.....	32-33	1,500			
12.....	33-34	1,575			
13.....	34-35	1,650			
			Total.....		70,275
			Average annual salary.....		1,850

The scale here recommended may be compared with the average salaries prevalent in two types of secondary schools in receipt of grants from the treasury.

Average salaries in two types of secondary schools.

Teachers and principals.	Council schools.		Foundation schools.	
	Number.	Average salary.	Number.	Average salary.
Assistant teachers:				
Men.....	1,655	\$835	2,275	\$875
Women.....	2,136	635	1,355	625
Principals:				
Men.....	221	1,950	330	2,465
Women.....	390	1,435	93	1,990

In addition to salary scales, which will probably be put into effect under the broad powers intrusted to the Board of Education, secondary school-teachers in grant-earning schools are eligible to the pension benefits provided under the superannuation act of 1918.

TEACHERS' SUPERANNUATION ACT OF 1918.

The urgent need of securing men and women to promote that development of education for which the act prepares the way, has not only directed attention to the question of salaries, but has prompted the Government to introduce a system of pensions for all grades of teachers. Whatever may be the result of the recommendations of the committees appointed to consider salaries, a pension system has already been established by the school-teachers' (superannuation) act, passed in November, 1918. The main purpose of the act is to attract men and women to the teaching profession by giving them "that sense of elasticity and freedom from care, which is essential to the proper discharge of their duties." By extending the benefits of the act to teachers in all schools aided by the State, the act will also promote the unity of the profession, and will to this extent supplement the efforts of the Teachers' Registration Council. Combined with adequate salary scales, the pension system should contribute to an improvement in the qualifications of teachers.

The act provides benefits for teachers in all grant-aided institutions below the grade of universities or university colleges. These include elementary, secondary, and technical schools, training colleges for teachers, and other institutions in receipt of aid from the State. Teachers will become eligible for the superannuation allowance at the age of 60 after 30 years of qualifying service, of which at least 10 years must be recognized service in a grant-aided school. The age

of retirement is the same for men and women, but in the case of women who withdraw from service to marry and later return to teaching, the period of qualifying service is reduced to 20 years. The distinction between qualifying and recognized service permits migration to and from grant-aided schools to schools not on the grant list, but all service in the following types of schools is excluded: (a) Schools conducted for private profit, (b) schools not open to inspection by the Board of Education, and not shown to the satisfaction of the board to be efficient; (c) schools able out of their own resources to maintain a satisfactory pension scheme, and (d) schools which do not satisfy such other conditions as may be prescribed as necessary or desirable for securing the public interest.

The amount of the retirement allowance is one-eightieth of average salary for each year of recognized service, or one-half of the average salary, whichever is the less. In addition a gratuity will be given in a lump sum of one-thirtieth of average salary for each year of recognized service, or one and a half times the average salary, whichever is the less. Disability allowances of one-twelfth of average salary for each year of recognized service will be paid after 10 years of service to teachers incapable of further service by reason of infirmity of mind or body. In the case of death after five years of recognized service a death gratuity will be paid to the legal representatives of a deceased teacher of an amount not exceeding the average salary; where a teacher dies after retirement without having received an amount equal to his average salary on account of his superannuation allowance and the additional allowance, the board may grant to his legal representatives a gratuity not exceeding the difference between these two sums.

The act abolishes the deferred annuity system under the acts of 1898 to 1912, but annuities will be paid in respect to contributions already made and teachers are given the option of continuing their contributions or of coming under the new scheme. Local pension schemes are similarly abolished and contributions are to be returned to the teachers, unless they desire to forego the benefits of the act.

The administration of the act is in the hands of the Board of Education, which is empowered to frame rules for this purpose. The board may refuse or reduce allowances in cases of misconduct of teachers. Its decisions on the application of the act are final. In the words of the act:

Nothing in this act shall give any person an absolute right to any superannuation allowance or gratuity, and, except as in this act provided, the decision of the board on any question which may arise as to, or which may affect, the application of the act to any person, or the qualification for any superannuation allowance or gratuity, or the amount of any superannuation allowance or gratuity, or any questions which may arise as to the amount of the average salary of any teacher shall be final.

In thus establishing a noncontributory pension system Mr. Fisher has departed from the tendency which has been very generally accepted in the establishment of local pension systems in Great Britain, in many parts of the British Empire, and in the United States. It is estimated that the cost of the scheme in about 10 years will be \$10,000,000 a year, but as no actuarial investigation has been made, this figure is nothing more than an estimate, which is particularly dangerous at a time when salary rates are changing and show an upward tendency. However, the Government is protecting itself by the provision that there is "no claim to superannuation allowances or gratuities as of right." As a measure for meeting the immediate demand for teachers the act will undoubtedly serve this purpose, as it will also tend to promote unity among teachers, and raise the standards of instruction in schools, service in which is excluded under the act. The history of other noncontributory pension systems does not, however, offer a sound guaranty of the future success of the present act.

ADULT EDUCATION.

Of the many reports on education that have appeared during the war period, none goes more thoroughly into the problem and none is more significant than the interim report of the committee on adult education, which was appointed by the Minister of Reconstruction, "to consider the provision for, and possibilities of, adult education (other than technical or vocational) in Great Britain, and to make recommendations." Reaching the conclusion that industrial and social reforms are necessary to make adult education possible and effective, the committee issued the present interim report on industrial and social conditions in relation to adult education.¹

The committee points out that "there is a wide and growing demand among adults for education of a nonvocational character," accompanied among the working classes by considerable suspicion of "technical" education. The motives underlying the demand for education are based partly "upon a claim for the recognition of human personality," partly upon a desire to become "better fitted for the responsibilities of membership in political, social, and industrial organizations." The new problems that will confront democratic societies everywhere in all branches of organized life will demand intelligent participation on the part of men and women of all classes, and since many of these problems are of such a nature that they can be grasped only after experience with the world, the committee is of the opinion that "facilities for adult education must therefore be regarded as permanently essential, whatever developments there may be in the education of children and adolescents."

¹ Committee on Adult Education, Interim Report. *Industrial and Social Conditions in Relation to Adult Education.* Cd. 9107 (London, 1918).

Although a discussion of the question of adult education is reserved for a subsequent report, a general survey of the existing facilities is presented. These cover a remarkable array of activities and include besides the well-known University Extension Lecture System, the University Tutorial Class Movement, the Workers' Educational Association, Ruskin College and the Labor College, a number of organizations like the Adult School Movement, the Cooperative Societies' educational work, working men's colleges, clubs, summer courses, and libraries, as well as the more formal work of the local education authorities. The war has stimulated an interest in the historical background and causes of the war and in the problems of reconstruction. But extensive as the facilities have been, their reach has not been universal. "What is needed is some organization sufficiently comprehensive and systematic to bring facilities for higher education within the reach of the inhabitants of every town and village in the country."

The most significant and valuable contribution of the report is the analysis of the industrial and social conditions that militate against the effectual operation of a system of adult education, however well organized and financed. The survey of these conditions inevitably leads to recommendations which, if accepted, may alter the whole face of industrial and economic life in England. The report presents a treatment of educational politics that is altogether too rare and infrequent. Excessive hours of work, overtime, the shift system, and night work are all obstacles that must be overcome before adequate consideration can be given to the problem referred to the committee. "From the point of view of education and of participation in public activities (which we regard as one of the most valuable means of education)," declares the committee, "we are of opinion that one of the greatest needs is the provision of a greater amount of leisure time; this is the more necessary because of the increasing strain of modern life." A shorter working day will go far to protect the worker against the worst consequences of monotonous toil, but this should be supplemented by alternating forms of employment and opportunities for the exercise of initiative. "The more industry becomes a matter of machinery, the more necessary it becomes to humanize the working of the industrial system." With the improvement of these conditions there still remains the problem of coping with heavy and exhausting work, whose depressing effects can be increasingly counteracted by the introduction of mechanical devices, and the prevalence of which, if such conditions can not be ameliorated, would not be tolerated in the light of adequate publicity. The introduction of a reasonable holiday without stoppage of pay for all workers in town and country, the committee

believes, "would have a beneficial effect upon the national life." Finally, the fear of unemployment which—

hangs like a heavy cloud over so many breadwinners brings a sense of insecurity into the life of the worker and deprives him of all incentives to take a whole-hearted interest in the various activities which are a necessary accompaniment of a complete life.

The progressive increase in productivity that has characterized the development of industry in the last generation has resulted in specialized, mechanical, and monotonous labor, with the consequent stunting of the creative impulse and of the spirit of craftsmanship and the deprivation of opportunities for self-expression. These conditions react on human personality in so far as "the present industrial system offers little opportunity for the satisfaction of the intellectual, social, and artistic impulses." The committee accordingly urges the need for a new industrial outlook:

Adult education and, indeed, good citizenship, depend in no small degree, therefore, upon a new orientation of our industrial outlook and activities. Improved conditions and the diffusion of responsibility for the proper conduct of industry will strengthen the need for educational opportunities. In so far as that need is fulfilled, industry will gain by a more effective "industrial citizenship," and will itself become more truly educative. Thus increased opportunities for adult education and the stimulus of a freer and finer industrial environment are correlative and help to develop each other. Education is to be measured essentially in terms of intellectual accomplishment, power of esthetic appreciation, and moral character, and these have little or no opportunity for realization except through a harmonious environment. Nor is the environment likely to be substantially modified except in response to the higher ideals of social life, stimulated by a more prolonged and widely diffused education.

Addressing itself to the problem of improving the environment, the committee emphasizes the importance of the preparation of schemes of housing, town planning, and public health by the cooperation of experts and representatives of the people for whom such schemes are intended, especially women, to whom an adequate scheme of housing reform will bring an improvement in conditions without which they will be unable to play their new part in public affairs. For the improvement of rural life, measures are needed beyond the necessary improvement of labor conditions. A communal organization that will promote vigorous intellectual and social life in the country districts is essential. To this end the committee recommends the provision of a hall under public control with a village institute providing for many-sided activities as the ideal to be aimed at.

In conclusion, the committee is under no delusions as to the possibility of putting its recommendations into early practice. It does draw attention to the fact that at this turning-point in England's

national history "it is in our power to make the new era one of such progress as to repay us even for the immeasurable cost, the price in lives lost, in manhood crippled, and in homes desolated." The war has generated a new spirit which must be utilized immediately as a foundation for the future.

We have awakened to the splendid qualities that were latent in our people, the rank and file of the common people, who before this war were often adjudged to be decadent, to have lost their patriotism, their religious faith, and their response to leadership; we were even told they were physically degenerate. Now we see what potentialities lie in this people and what a charge lies upon us to give these powers free play. There is stirring through the whole country a sense of the duty we owe to our children, and to our grandchildren to save them not only from the repetition of such a world war and from the burdens of a crushing militarism, but to save them also from the obvious peril of civil dissension at home. We owe it also to our own dead that they shall not have died in vain, but that their sacrifice shall prove to have created a better England for the future generation.

EDUCATIONAL RECONSTRUCTION AND PUBLIC OPINION.

The dislocation caused in the social, economic, and educational life of the country by the outbreak of the war has already been mentioned. For a time events of larger moment that were happening in France tended to overshadow the discussion of domestic problems. In the attempts to understand the German enigma, however, it was inevitable that attention should be turned to the German educational system and that comparisons should be instituted between that and the English. It was not many months before a fierce controversy broke out between the classicists and the scientists in which the advocates of modern language studies soon joined. But the dissatisfaction that began to find voice was not confined to higher education; it spread very naturally to the elementary schools and expressed itself in criticism of the school attendance regulations, of the early exemptions, of the lack of advanced work in the upper grades, and particularly of the absence of provision for the large class of boys and girls who are allowed to drift after leaving the elementary schools. The dissatisfaction and criticism were not new; they had already been heard before the war; but as soon as it became clear that the war was one of conflicting ideals, they received at once a new stimulus and a new focus or objective. The shortcomings of English education began to be measured by their adequacy for training healthy, moral, and intelligent citizens of a democracy. In discussing the "Outlook for 1914" the Times Educational Supplement in January of that year wrote:

Like English poetry and English painting, our education is astir with new ideas. These new ideas are not all of one pattern, but often discordant with one another, the offspring of different stocks, and as diverse as the roots from

which they spring, though novel in their combinations and sometimes one-sided in their emphasis.

The war helped to furnish a rallying and unifying point for the new ideas and stimulated a widespread interest in education which was not present even three months before the outbreak of the war, and certainly not in 1911, when Mr. Runciman presented the school and continuation class attendance bill, or when the several efforts were made to abolish the half-time system.

It was less than a year after England's entrance into the war when discontent and criticism began to make way for the discussion of a constructive program. In May, 1915, the Times Educational Supplement propounded the question, "How can the educational institutions of the country be molded and developed to fit the childhood of the nation to meet wisely the problems of the Great Peace?" and in the same month Mr. Pease, shortly before retiring from the office of president of the Board of Education, emphasized the urgent need of longer schooling, greater opportunities, and closer relations between scientific research and industry. It began to be generally accepted that the appointed hour for reform had arrived. "If we are to face the future with any confidence after this exhausting war," wrote the Times, "we must face it as an educated people. We shall not be able to afford to waste the efficiency of a single English child." By the close of 1915 the reform movement was in full swing, and by the middle of the following year the Times was able to report that "it is certain that there is not now a place in England where educational affairs are considered that is not agog with the demand for reform."

The consideration of plans for educational reconstruction was not confined to the teaching profession. The problem occupied the attention of leaders of the working classes, local and national trade-union bodies, manufacturers and employers, and the public in general. Early in 1916, the Athenaeum, hitherto devoted almost exclusively to literature, changed its character and dedicated its pages to the consideration of the broader phases of reconstruction. Later in the same year the Times Educational Supplement, until then a monthly magazine, decided to appear weekly "in the hope of enabling the public, which is now bent upon educational reform, to take an instructed part in the process."

The Trade-Union Congress, meeting in Birmingham early in September, 1916, passed resolutions protesting against the employment of children in agricultural work, factories, and workshops, and against any reduction in the expenditure on education, and pledged itself to support all measures to secure a higher standard of education for all children. The British Labor Party, in the program of reconstruction issued at the close of 1917, emphasized the demands

for health, leisure, education, and subsistence, and urged the application of national funds "for the education alike of children, of adolescents, and of adults, in which the labor party demands a genuine equality of opportunity, overcoming all differences of material circumstances." The general secretary of the Workers' Educational Association, Mr. J. M. Mactavish, had already given a more detailed definition of these demands in a pamphlet on *What Labor Wants from Education*:

Labor wants from education health and full development for the mind, fineness for the feelings, good will toward its kind, and, coupled with this liberal education, such a training as will make its members efficient, self-supporting citizens of a free self-governing community. Such an education and only such an education will meet the needs of the individual, the class, the nation, and the race.

Mr. Fisher, appreciating the influence of labor in the development of public opinion on education, paid a tribute to the leaders in the introduction to his *Educational Reform Speeches*.¹ "The leaders of the labor world, having discovered education some time since, are now communicating the message to those below."

To these expressions of faith on behalf of labor there deserve to be added the views of the more enlightened employers. After the introduction of Mr. Fisher's first bill Messrs. Tootal, Broadhurst, Lee Co. (Ltd.), of Manchester and London, issued four pamphlets² urging the support of the bill. The platform that they insisted upon was the following:

We believe that the vast majority of the nation favor the main proposals of the new education bill, viz, 1. Whole-time education up to the age of 14. 2. Compulsory part-time education up to 18.

Over and above these proposals a straight road to the university should be open to those who desire the fullest development of their intellect. Only by such provision for complete knowledge of the arts and sciences can we as a nation maintain our place in the world.

It is important for the opponents of the bill to realize that the two proposals we have mentioned are regarded by educationists as merely a first step to a real system of democratic education.

They are by no means exorbitant proposals. They represent in fact a minimum of democracy's demand for a fuller life. They do nothing more than give a reasonable chance to the children of this country to make the best of themselves.

Local reconstruction committees began to be formed and a large number of professional associations devoted themselves to the task of drafting plans of reforms, while the daily press gave increasing attention to the subject. "Nothing has been more remarkable," said

¹ Fisher, H. A. L. *Educational Reform Speeches* (Oxford, 1918).

² These appeared first as advertisements in the country's press. They were published under the title "The Great Decision," and included four pamphlets: *Now or Never, Our Success or Failure, A Just Complaint, and A First Step*. Messrs. Cadbury, of Bourneville, followed a similar policy.

Mr. Fisher in introducing his first educational estimate in 1917, "than the attention which has recently been paid, both in the public press and on public platforms, to the subject of education."

Among the professional associations the following issued proposals for educational reconstruction:

- Assistant Masters Association (Educational Policy).
- Directors and Secretaries for Education (Toward an Educational Policy).
- Teachers of Domestic Subjects (Memorandum).
- Education Committees (Report of Executive).
- Education Officers' Association (Policy).
- Education Reform Council (Education Reform).
- Headmasters' Association (Educational Policy).
- Headmistresses Conference.
- British Science Guild (National Education).
- Teachers' Registration Council (Resolutions).
- Technical Institutions Association.
- Workers' Educational Association (Educational Reconstruction).
- National Union of Teachers (Educational Progress).
- London County Council Education Committee (Education after the War—Government Grants and Educational Development).

The suggestions and recommendations of some of these bodies received wide publicity and consideration. Many of these recommendations, as well as the proposals contained in a draft bill, which appeared in the Times Educational Supplement of March 15, 1917, were embodied in the act as finally passed.

The Government in the meantime was not neglecting the subject of education. It was recognized that the reform of education could not be considered in isolation but must fit in with the general plan for national reconstruction. The subject of reconstruction was for a time intrusted to a committee consisting of members of the Cabinet, but it soon became clear that such a committee could not devote to the problem the attention that it deserved. In March, 1917, a new committee of reconstruction was appointed with the Prime Minister as chairman and Mr. E. S. Montague as executive head. Four months later the province of the committee was further expanded and under the new ministries act of 1917 a ministry of reconstruction was established. According to the Report of the War Cabinet, for 1917, page xix—

The scope of its activities covers almost every branch of the national life. It has been concerned not only with the problems which will arise immediately on the return of peace, such as the demobilization of the armies and reconversion to peace production of many industries now making war material; it has also to consider education, the supply and distribution of raw material, a great scheme for the better housing of the people both in town and country, labor and industrial problems, transportation, national health, and so forth.

For a time it was expected that a royal commission would be appointed to consider proposals for educational reform, but at the end

of June, 1916, it was announced that the problem of education would come within the scope of the cabinet committee of reconstruction. Education, however, constituted but one of 15 different branches of activities, the consideration of which was intrusted to 87 distinct committees.¹ It was clear that even the adoption of this course would involve delay, and it does not appear that this plan was eventually carried out, with the exception that a number of separate problems were left for consideration by the section of the Ministry of Reconstruction in charge of education. The following committees were established and placed under this ministry (the appointing authorities and the dates of the reports, if they have already been issued, are given in parentheses):

Royal Commission on University Education in Wales. (The Crown; Cd. 8991 and Cd. 8993; 1918.)

Adult Education Committee. (Ministry of Reconstruction; Cd. 9107; 1918.)

Committee on Juvenile Education in Relation to Employment after the War. (Board of Education; Cd. 8512 and Cd. 8577; 1917.)

Committee on the Teaching of Modern Languages. (The Prime Minister; Cd. 9036; 1918.)

Committee on the Teaching of Science. (The Prime Minister; Cd. 9011; 1918.)

Committee on Principles of Arrangements Determining Salaries of Teachers in Elementary Schools. (Board of Education; Cd. 8939; 1918.)

Committee on Principles of Arrangement, Determining Salaries of Teachers in Secondary, Technical, etc., Schools. (Board of Education; Cd. 9140; 1918.)

Juvenile Organizations Committee. (Home Office.)

It will be seen that most of these committees have already reported, and an account of these reports is given elsewhere.

✓ The Government had also entered upon new developments in another direction—the promotion of scientific and industrial research. ✓ In 1915, under a scheme for the organization and development of scientific and industrial research (Cd. 8005, 1915), there were established a committee of the Privy Council responsible for expenditure of any new moneys provided by Parliament for such research, and a small advisory council composed of eminent men of science and others actually engaged in industries dependent upon scientific cooperation. ✓ On December 1, 1916, the committee and council were replaced by a Department of Scientific and Industrial Research. The object of this new development is indicated in the statement that:

It appears incontrovertible that if we are to advance or even maintain our industrial position, we must as a nation aim at such a development of scientific and industrial research as will place us in a position to expand and strengthen our industries and to compete successfully with the most highly organized of our rivals. ✓

¹ Ministry of Reconstruction. A list of commissions and committees set up to deal with questions which will arise at the close of the war. Cd. 8916. (London, 1918.)

The scope of the department's activities is to consider—

(1) Proposals for instituting scientific researches; (2) proposals for establishing or developing special institutions or departments of existing institutions for the scientific study of problems affecting particular industries and trades; (3) the establishment and award of research studentships and fellowships.

The department has begun active cooperation with scientific societies, institutions, trades, and industries, and has already stimulated the establishment of research associations maintained by local industries either independently or in cooperation with local universities. The task devolving as a consequence upon members of the department is thus described in the scheme under which the original committee and advisory council were established:

A large part of their work will be that of examining, selecting, combining, and coordinating, rather than of originating. One of the chief functions will be the prevention of overlapping between institutions or individuals engaged in research. They will, on the other hand, be at liberty to institute inquiries preliminary to preparing or eliciting proposals for useful research, and in this way they may help to concentrate on problems requiring solution the interest of all persons concerned in the development of all branches of scientific industry.

The establishment of the department represents the realization of some of the proposals and recommendations made by the committee to inquire into the position of natural science.

Associated with this movement is the report of the subcommittee on relations between employers and employed on joint standing industrial councils (Cd. 8606, 1917). This report, more generally known as the Whitley Committee Report, is not directly educational, but in its development it will exercise a tremendous influence in expanding the scope of education for the working classes. The committee recommends the establishment of national, district, and works committees or councils, consisting of representatives of employers and employees, and of the associations of the former and trade-unions of the latter.

The object is to secure cooperation by granting to workpeople a greater share in the consideration of matters affecting their industry, and this can only be achieved by keeping employers and workpeople in constant touch.

• Among some of the questions that the committee suggests for the consideration of such councils are (1) the better utilization of the practical knowledge and experience of workpeople; (2) technical training and education; (3) industrial research and the full utilization of the results; (4) the provision of facilities for the full consideration and utilization of inventions and improvements designed by workpeople, and for adequate safeguarding of the rights of designers of such improvements; and (5) improvements of processes,

machinery, and organization and appropriate questions referring to the management and the examination of industrial experiments, with special reference to cooperation in carrying new ideas into effect and full consideration of the point of view of the employees with reference to them. The educational implications are obvious. If the working classes are to avail themselves of the new position with which they will be endowed by the establishment of councils, they must also avail themselves of all the educational opportunities that the Nation can put at their disposal. The burden is thus placed finally on the Nation to provide as extensive facilities as possible to equip every boy and girl for the new industrial conditions. Many industrial councils have already been established, and for educational administration it is significant that teachers are demanding the setting up of joint councils representing the active teaching profession and the education committees that employ them.

Finally, it would be equally impossible to leave out of an account of the social background that led up to the education act reference to the passing of the Representation of the People Act early in 1918, which extends the franchise to about two million additional male and six million new female voters. It is estimated that the numbers of persons qualified under the act to vote is about one-third of the population, or about ten million men and six million women. At the same time the university franchise has been extended and the number of seats in the House of Commons raised by redistribution from 670 to 707. Again, as throughout the nineteenth century, every extension of the franchise has been followed, very closely in the present case, by an extension of educational opportunities. It is inevitable that the evolution of political democracy should be accompanied by the expansion of a democratic system of education, for "the same logic which leads us to desire an extension of the franchise points also to an extension of education."

By the close of 1916 the stage was set for the introduction of the proposals for educational reconstruction. The problem had been canvassed from every direction and every point of view. The mental attitude that then separated the ultimate conception of the problem from the conception of the education problem in 1902 and 1906 could hardly be measured by the number of years that separated the two periods. The denominational question has, as Lord Haldane had predicted earlier, vanished in comparison with the really vital problems; the nation was united in conceiving the task of educational reform in the terms so appropriately set forth by the departmental committee on juvenile education in relation to employment after the war.

Any inquiry into education at the present juncture is big with issues of national fate. In the great work of reconstruction which lies ahead there are

aims to be set before us which will try, no less searchingly than war itself, the temper and enduring qualities of our race; and in the realization of each and all of these, education, with its stimulus and its discipline, must be our stand-by. We have to perfect the civilization for which our men have shed their blood and our women their tears; to establish new standards of value in our judgment of what makes life worth living, more wholesome and more restrained ideals of behavior and recreation, finer traditions of cooperation and kindly fellowship between class and class and between man and man. We have to restore the natural relations between the folk and the soil from which the folk derives its sustenance, to revivify with fresh scientific methods and better economic conditions the outworn practice of our agriculture, to learn over again that there is no greater public benefactor than the man who makes two ears of corn to grow where but one grew before. We have to bring research to bear upon the processes of our manufactures, to overhaul routine and eliminate waste, to carry our reputation for skillful workmanship and honest and intelligent trafficking into new markets and to maintain it in the old. These are tasks for a nation of trained character and robust physique, a nation alert to the things of the spirit, reverential of knowledge, reverential of its teachers, and generous in its estimate of what the production and maintenance of good teachers inevitably cost. Whether we are to be such a nation must now depend largely upon the will of those who have fought for us, and upon the conception which they have come to form of what education can do in the building up and glorifying of national life. For ourselves, we are content to leave it to that arbitrament.

The recommendations of this committee were generally accepted as furnishing the framework for the educational legislation that was expected. (See p. 23.)

It was under these conditions that Mr. H. A. L. Fisher was appointed president of the Board of Education in December, 1916. His appointment was greeted with universal approval. It was an appointment in which mere political considerations were subordinated to the great needs of the hour and of the office. In Mr. Fisher's nomination the presidency of the Board of Education was filled by a man eminently equipped for the position, and not by a rising politician for whom the Board of Education was to serve merely as a temporary stepping stone on the road to higher office. Mr. Fisher combines distinction as a scholar in his chosen field of history with an interest in popular education. His fellowship at New College, Oxford, had given him an experience with the problems of higher education that he was beginning to apply to the needs of one of the youngest universities. As vice-chancellor of the University of Sheffield he was inevitably brought into touch with needs and the demands of popular education. His grasp of the task to which he was called was strengthened by membership on a number of the commissions and committees to which reference has been made. The confidence of the country in his ability to carry out the task to a successful conclusion was soon to be justified by Mr. Fisher's success in presenting the problem to Parliament and to the country, and by his

adroit handling of all the obstacles and difficulties that stood in his way in spite of the readiness of the country for the reform proposals.

Mr. Fisher at once addressed himself to the solution of the problem intrusted to him. In February, 1917, he issued a stirring appeal, *Sursum Corda*, to the teachers of the country, in which he reminded them that:

The proclamation of peace and victory in the field will summon us not to complacent repose, but to greater efforts for a more enduring victory. The future welfare of the Nation depends upon its schools.

On April 19, 1917, he had an opportunity of testing the new faith of the country in education, when he introduced the education estimates in the House of Commons. The task of demanding from Parliament an increase for 1917-18 of more than \$19,000,000 over the estimate for the previous year, was one that would have deterred a parliamentarian of longer experience than Mr. Fisher, but the Parliament of a country that was then spending about \$35,000,000 a day on the work of destruction could not well refuse its consent to increased estimates for education:

So that the foundations may be laid for a fabric of national education worthy of the genius and heroism of our people and a fitting monument of the great impulse which is animating the whole nation during the war.

The chief part of the increase was to be devoted to securing "the first condition of educational advance," the better payment of teachers, to the importance of which Mr. Fisher referred in the words:

I do not expect the teaching profession to offer great material rewards—that is impossible; but I do regard it as essential to a good scheme of education that teachers should be relieved from perpetual financial anxieties, and that those teachers who marry should be able to look forward to rearing a family in respectable conditions. An anxious and depressed teacher is a bad teacher; an embittered teacher is a social danger.

In the course of his speech Mr. Fisher foreshadowed the nature of the bill that he was shortly to introduce:

The object which we are all striving to attain is very simple. We do not want to waste a single child. We desire that every child in the country should receive the form of education most adapted to fashion its qualities to the highest use. This will mean that every type and grade of school in the country must be properly coordinated. It will mean that the county authorities, either separately or combined together in provincial committees, should make complete and progressive schemes for education in their respective areas, so that adequate and systematic provision may be made not only for the elementary, but also for technical, commercial, and secondary education of the children in the district.

The unanimity with which the increased expenditure for education was received prepared the way for the education bill, which Mr. Fisher introduced on August 10, 1917. "The bill," said Mr. Fisher, "is prompted by deficiencies which have been revealed by the war;

it is framed to repair the intellectual wastage which has been caused by the war."

Into the details of the bill it is unnecessary to go; the causes of opposition to it are given in another section. But its introduction afforded Mr. Fisher another opportunity of declaring his educational faith. Striking throughout was his appreciation of the views of the leaders of the labor world:

I notice also that a new way of thinking about education has sprung up among more reflecting members of our industrial army. They do not want education in order that they may rise out of their own class, always a vulgar ambition; they want it because they know that, in the treasures of the mind, they can find an aid to good citizenship, a source of pure enjoyment, and a refuge from the necessary hardships of a life spent in the midst of clanging machinery in our hideous cities of toll.

The conclusion of his speech furnishes an admirable summary of the newly born recognition of the place of education in the national life:

We assume that education is one of the good things of life which should be more widely shared than has hitherto been the case amongst the children and young persons of the country. We assume that education should be the education of the whole man, spiritually, intellectually, and physically, and that it is not beyond the resources of civilization to devise a scheme of education possessing certain common qualities, but admitting at the same time of large variation from which the whole youth of the country, male and female, may derive benefit. We assume that the principles upon which well-to-do parents proceed in the education of their families are valid also, *mutatis mutandis*, for the families of the poor; that the State has need to secure for its juvenile population conditions under which mind, body, and character may be harmoniously developed. We feel also that in the existing circumstances the life of the rising generation can only be protected against the injurious effects of industrial pressure by a further measure of State compulsion. But we argue that the compulsion proposed in this bill will be no sterilizing restriction of wholesome liberty, but an essential condition of a larger and more enlightened freedom, which will tend to stimulate civic spirit, to promote general culture and technical knowledge, and to diffuse a steadier judgment and a better informed opinion through the whole body of the community.

The closing months of the year were spent by Mr. Fisher in touring the country, particularly the manufacturing centers, for purposes of propaganda. Many employers had still to be won over to the idea of compulsory continuation schools; and much opposition had developed against the bill among those concerned with the administration of education. Deputations had to be met, compromises considered, and the bill so amended that it would in effect become an accepted bill on its introduction. The first bill was withdrawn in January of 1918, and a new one took its place, with the elimination of those features to which objections had been raised. In introducing the second reading of the new bill on March 14, 1918, Mr. Fisher continued to maintain the high standards of statesmanship that

marked his speeches on the first bill. His final plea for the passage of the bill will probably rank as the clearest and most far-sighted analysis of England's need for educational reform that has been made in the course of the last four years:

The broad question before the House is whether the education provided for the general mass of our young citizens is adequate to our needs. We have been asking them to fight and work for their country, we have been asking them to die for their country, to economize for their country, to go short of food for their country, to work overtime for their country, to abandon trade-union rules for their country, to be patient while towns are bombed from enemy aircraft, and family after family is plunged in domestic sorrow. We have now decided to enfranchise for the first time the women of this country. I ask then whether the education which is given to the great mass of our young citizens is adequate to the new, serious, and enduring liabilities which the development of this great world war created for our Empire, or to the new civic burdens which we are imposing upon millions of our peoples. I say it is not adequate. I believe it is our duty here and now to improve our system of education, and I hold that, if we allow our vision to be blurred by a catalogue of passing inconveniences, we shall not only lose a golden opportunity, but fail in our great trust to posterity.

These words furnished a fitting climax to the campaign of nearly four years to change the opinion of a country from apathetic indifference to education to the stage where almost the only criticisms of the act which stands to Mr. Fisher's credit come from those who feel that it does not go far enough.

SIGNIFICANCE OF THE EDUCATION ACT, 1918.¹

By the enactment on August 8 of the Fisher education bill the first step has been made toward the realization of the program of social and economic reconstruction that is to follow the war in England. For the reform of the English educational system, and of the Scottish system which is being provided for separately (see pp. 110ff), is but part of the larger task that has been intrusted to such bodies as the Ministry of Reconstruction or the Department on Scientific and Industrial Research. Without the sound foundations laid in the earlier years of school life, any recommendations that such bodies may make on adult education, public health, physical training, unemployment, juvenile employment and apprenticeship, or cooperation between science and industry would inevitably remain nothing more than pious hopes. Educational reform in England to-day is also inevitably associated with the recent extension of the franchise and indirectly will have some bearing on the recommendations of the Whitley committee. Nor can the act be considered apart from the administrative changes already made by the Board

¹ This section, with the exception of some additions, appeared in the *Educational Review*, December, 1918, and is here reprinted by the courtesy of the editor.

of Education, such as the regulations for advanced courses and examinations in secondary schools, from the Superannuation Act passed in November, 1918, or apart from departmental reports such as those on salaries for elementary and secondary school teachers, on the teaching of modern languages, or on the position of natural science in the schools. The quickened recognition by the public of the essential function of education in national life must also be taken into account as one of the assets for the future. Public interest and support have acquired an impetus from the conditions and realizations arising out of the war that has made possible such educational progress within one year as could in normal times not have been achieved in less than a generation. The sacrifices and public burdens undertaken by teachers of all grades throughout the country have given them a repute and status that they have not hitherto enjoyed, and it will result in substantial improvement of their material position. The outlook of the local educational authorities has also been deeply affected by the urgent necessity of giving much closer attention than ever before to the educational problems under adverse conditions. Finally, although little is as yet known about its effects, the educational activities undertaken with the army will undoubtedly have a healthy reaction on that public opinion without which educational progress is impossible.

It is too often forgotten in recent discussions of English education that the train for a comprehensive and progressive improvement of the educational system had already been laid before the war in the budget speech of the Chancellor of the Exchequer on May 4, 1914. The act accordingly does not constitute a revolution in English education. It represents the normal development whose evolution has been hastened by the favorable conditions already described. After the satisfactory reception of the estimates for the Board of Education, introduced by Mr. Fisher in April, 1917, and calling for an increase of more than \$18,000,000 over the estimates of the previous financial year, the passage of an education bill to meet the new demands, as formulated by numerous education authorities and associations of lay and professional men and women, was a foregone conclusion. Mr. Fisher's first essay, however, a bill which he introduced in August, 1917, was from the first condemned to failure because it exceeded these suggestions and recommendations and because it was suspected of being an attempt to conceal a scheme for centralized control over education, behind a large number of measures otherwise acceptable. While the country was ready and willing to surrender its rights to the National Government in the interests of the conduct of the war, it did not show itself so amenable in accepting what might prove to be a bureaucratic and centralized system of educational

administration for all time. The education authorities were up in arms against the administrative measures and indicated in no uncertain terms their refusal to countenance any education bill at all that threatened their liberties or might interfere with local initiative and variety. In every case the administrative discretion of the Board of Education has been surrounded by limitations. Clause 4 of the first bill, which gave the board the final word in the approval or rejection of schemes submitted by the local education authorities, now becomes clause 5, and a definite procedure has been established in cases of conflict between a local education authority and the board, with final power vested in Parliament. The old clause 5, which provided for the combination of local areas into provincial associations in accordance with Lord Haldane's proposals, has been dropped altogether, and the same fate met the old clause 29, which would have permitted the board to transfer the smaller to larger educational areas. Clause 38 in the original bill also disappears and with it any danger that the board would become the final authority in cases of dispute with local authorities. Finally, the old clause 40 now becomes clause 44, and the indefinite provisions for national grants to education are replaced by a definite undertaking that these shall amount to not less than one-half of the local expenditure. A few additions and amendments have been made, in each case extending rather than limiting the powers of local authorities.

✓The general structure of the educational system remains the same as under the provisions of the Education Act of 1902,¹ that is, the responsible authorities for elementary and higher education consist of counties and county borough councils, and for elementary education of the councils of noncounty boroughs and urban districts. The relation of the Board of Education to the local education authorities continues as hitherto with the broad exception that it now has the power of approving or rejecting schemes "for the progressive development and comprehensive organization of education" that may be submitted to it by the local education authorities. ✓In cases of conflict between the board and a local authority the act provides for a conference or public inquiry, and in the last resort the submission of a report to Parliament with reasons for any action taken by the board. ✓The grants from the national exchequer have been consolidated and will in the future be dependent on the approval by the board of such progressive and comprehensive schemes of education in a local area. ✓The act abolishes the fee, the aid, and the small population grants, and provides that the consolidated grant shall be not less than one-half of the expenditure of a local authority. ✓By this means the board will have the power of requiring, among other

¹ For a detailed statement see Kandel, I. L. Elementary Education in England. U. S. Bureau of Education, Bulletin, 1913, No. 57.

things, the efficient administration of school attendance, the satisfactory provision of elementary continuation and secondary schools, the maintenance of adequate and suitable teaching staffs, and the provision of adequate systems of medical inspection and treatment.// For the first time in the history of English education the national authorities are placed by the act in a position to secure full information as to the provision of education throughout the country, the responsibility of furnishing such information being placed upon the schools.// Under other provisions the board is empowered on request to inspect schools not already on its grant list and with local education authorities to inspect schools that desire to qualify as efficient for the purposes of securing exemptions from attendance at public elementary or continuation schools. The effect of these measures, combined with the indirect influence of the qualifications required of teachers for registration with the Teachers' Registration Council, will have an incalculable effect in raising the standards of private schools, and at the same time safeguarding their status. Room will thus be found under the national system for public and private schools, schools established and maintained entirely by the public authorities, and nonprovided schools, or those established by denominational bodies but maintained out of public funds. Such a scheme under the wise direction and advice of the Board of Education will secure that variety and initiative on which the English system is founded, while the new method of allocating grants will furnish the necessary encouragement for the rapid expansion of the system. It is significant that for the first time in English history the act speaks of the development of a national system of public education. By bringing the private schools into more effective relations with public education England will present an example of a national system in which public and private effort cooperate to the larger end.//

The responsibility for "the progressive development and comprehensive organization of education" is intrusted to the county authorities in all matters pertaining to elementary, secondary, and higher education. The noncounty boroughs and the urban districts have the same responsibility only in relation to elementary education, which is now considerably expanded in conception. Provision is made, however, for cooperation between the two types of authorities, and also for the federation of any two educational areas for cooperative purposes under joint bodies of managers, including teachers and representatives of universities. Under the extended powers of the act, education authorities now become the responsible authorities for the administration of the Employment of Children Act, 1903, the Prevention of Cruelty to Children Act, 1904, and the Children Act, 1908. Further, for the promotion of physical and social training, education authorities may maintain and equip holiday camps, centers

for recreation and physical training, playing fields, school baths, and swimming baths and other facilities in addition to the system of medical inspection and treatment. Finally, the limit hitherto imposed on the amount that could be raised by county authorities for secondary and higher education is removed. The duty is imposed on local education authorities to draft schemes for their areas after due consideration of existing facilities, public or private, and of the possible advantages of cooperation. Since the new system of grants will be based on the adequacy of a scheme as a whole, it will effectually check the development of schemes that are not comprehensive. Here again the Board of Education will act in an advisory capacity, and the responsibility for the development of local initiative and progress is placed on the local education authorities and so on the public in whose interests schools are maintained. The withholding of grants and the power of the board to conduct public inquiries, the reports of which may be laid before Parliament, are effective measures for dealing with recalcitrant authorities.

act While the improvement of the administrative organization of education constitutes one of the purposes of the act, it is not in any way its main purpose. Primarily, the act represents the new democracy rising to a recognition of the function of education in preparing healthy, intelligent, and responsible citizens. The advancement of the physical welfare of the nation with the promotion of educational opportunities, constitutes the chief objects of the act. As at the time of the South African War, so at this crisis, recruiting of soldiers has revealed the great extent of physical deficiencies in the country; at the same time a better chance for survival is to be furnished to every child in order to repair the physical wastage of the war. An already excellent system of school medical inspection and a developing system of medical treatment are extended by the act. In the schools for mothers training is given in prenatal care and the care of infant children. From the age of 2 to 5 or 6, children may attend nursery schools where attention will be devoted primarily to their "health, nourishment, and physical welfare." In the elementary schools the existing regulations for school medical inspection and treatment will apply, with the probability that more effective provision of the latter will be required under the procedure by schemes. By the provisions of the new act, local education authorities are empowered to extend this system of medical inspection and treatment to pupils in secondary and continuation schools maintained by them, and even in schools not aided by them, if so requested. Since the National Insurance Act applies to employed persons from the age of 16 up, the great majority of citizens in England and Wales will be under an effective system of medical supervision throughout their lives. At the same

time local authorities are required to ascertain the number of physically defective and epileptic children and make such provision for their education as they are already required to make for mental defectives under the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914.

These measures for the prevention and cure of disease are supplemented by positive measures for the promotion of health through physical training, which is to form an even more important part of the curriculum of elementary, continuation, and secondary schools than ever before. The power granted to authorities to supply or maintain holiday or school camps, centers and equipment for physical training, playing fields, school baths, school swimming baths, and "other facilities for social and physical training in the day or evening" has already been referred to. Before the passing of the act the Government had already inaugurated the practice of financially assisting local authorities in the appointment of play supervisors and in the maintenance of evening recreation centers. By these measures provision is made for social and moral training as well as physical. Mr. Fisher allayed the fear that an opportunity would be seized to expand physical training to cover military training. He agreed that—

It would be entirely inappropriate to take advantage of an education bill to introduce such a very radical alteration in our scheme of education as the introduction of compulsory military training in schools. So far as he knew their mind, the war office had no desire whatever to see military training in the continuation schools given to young people in this country. The interest of the war office was that young boys, when they reached the military age of 18, should be in fit physical condition. It was only after they had reached 18 that formal instruction under the war office began.

The control of child labor which constitutes the greatest menace to physical welfare, is now placed in the hands of the education authorities. /No child of school age will be permitted to be employed on any school day or on any day before 6 o'clock in the morning or after 8 o'clock in the evening or for more than two hours on Sunday. By an unfortunate concession, local authorities may by by-laws permit the employment of children over 12 for one hour before and one hour after school. /Street trading by children is prohibited, and restrictions are placed around the employment of children on the stage and in certain factories and occupations. On the report of a school medical officer individual children may be prohibited from engaging in certain occupations that may be prejudicial to health or physical development or interfere with their obtaining the proper benefit from education.

/In the matter of school attendance the act at one stroke removes all exemptions from attendance at public elementary schools, in

which fees are now entirely abolished, for children between the ages of 5 and 14, unless exemption is claimed on the ground of attendance at other schools that must be subject to inspection either by a local authority or the Board of Education. Thus is brought to a close controversy that has lasted nearly 30 years on the question of half-time attendance at school for children over 11 or 12 years of age. Where nursery schools are established, a local authority may permit attendance at these up to the age of 6 and transfer to the elementary schools at that age. Further, local authorities are empowered to enact by-laws requiring compulsory attendance at public elementary schools up to the age of 15, or, with the approval of the board, up to 16.

The act now extends the scope of the elementary schools by requiring the inclusion of practical instruction suitable to the ages, abilities, and requirements of the children and the organization of advanced instruction for the older or more intelligent children, who are not transferred to higher schools, by means of central schools and central or special classes. This provision means that children in the upper grades will not be required to waste what for many will be the last years of full-time education as the result of an antiquated definition of the term "elementary school." The act thus sets up what will virtually prove to be a system of intermediate education, with the right to exemption from attendance at continuation schools for children remaining until 16. The act does not define, nor did the debates bring out, the nature of the work that will be provided in the advanced courses, but the guess may be hazarded that they will follow the type already successfully inaugurated in the London central schools, and probably not unlike some of the schemes proposed for the junior high schools in this country.

For the present the question of providing free secondary schools is shelved, but local authorities are encouraged to provide a more adequate supply of secondary schools, with easier access to them, so that, in the words of the act, "children and young persons shall not be debarred from receiving the benefits of any form of education by which they are capable of profiting through inability to pay fees." The enlarged and enriched opportunities of education will consist not merely of an increase of free places to pupils from elementary schools and of scholarships, but also of the provision of maintenance allowances. Beyond the references already made the act does not deal with secondary schools, but the board has recently issued new regulations that will require the organization of advanced courses for pupils above the age of 16 who desire to specialize in classics, science, and mathematics, and modern languages. Up to the age of 16 it is intended that all pupils shall enjoy a general education with

due recognition of the claims of the classics, the sciences, and modern languages in a liberal education. Vocational preparation finds no place in the program, but will probably be provided in an extension of the number of junior and senior technical schools.

Up to this point Mr. Fisher encountered no difficulty in piloting his measure through the House of Commons. The storm center proved to be the provision for compulsory attendance at continuation schools for young persons between the ages of 14 and 18 for 8 hours a week for 40 weeks in the year between the hours of 7 in the morning and 8 in the evening. Employers are required not only to allow the time off necessary for attending school, but such additional time up to two hours as may be necessary to secure that a young person "is in a fit mental and bodily condition to receive full benefit from the attendance at school." The young person, his parents, and his employers may be liable to a fine if he fail to attend regularly. Exemptions from attendance are granted only to those who have attended a full-time day school to 16 or are in attendance at such school or are attending part-time continuation or "works" schools established by employers in connection with their factories and open to inspection by the board and the local education authority.

The chief opposition came from a small group of employers who feared that their supply of labor would be cut off. These were ready to suggest all kinds of compromises—half-time attendance for 20 hours a week between the ages of 14 and 16; special intensified and advanced courses for pupils between 12 and 14; and increased opportunities for secondary and university education for brighter pupils. But, as Mr. Fisher eloquently pointed out, "there is nothing sacrosanct itself about industry. The real interests of the State do not consist in the maintenance of this or that industry, but in the maintenance of the welfare of all its citizens."

To the surprise of the opposition, no less than of his supporters, Mr. Fisher agreed to postpone the full operation of the compulsory provision as it affects young persons between 16 and 18 for seven years from the appointed day, that is, the day on which the whole section is declared by the board to become operative. In addition he agreed to reduce the required attendance from 8 hours a week to 7 hours. The opposition was now satisfied, but many of the ardent supporters of the bill charged Mr. Fisher with betraying the cause. As a matter of fact Mr. Fisher has sacrificed nothing that he was not fully aware could be sacrificed. It is obvious that at this crisis, when the building of new schools is suspended, when the existing schools have the greatest difficulty in maintaining even a minimum supply of teachers, and when the industrial demands for labor are urgent, the full operation of the law would not have been pos-

sible. Mr. Fisher's compromise means that a start can soon be made and that the public will be educated to the full significance of the measure when the seven years are completed. A number of educational authorities and a number of the larger industrial establishments have already adopted schemes that have the approval of the board, thus disproving the contention that only the bare minimum required by Mr. Fisher's concession will be provided. The probability is that after seven years of experimentation local authorities will be ready to do more than the act requires.

As in the case of the advanced courses in elementary schools, the function of the continuation schools is broadly defined as schools "in which suitable courses of study, instruction, and physical training are provided without payment of fees." The provisions for social training and medical inspection will also apply to these schools. It is probable that the courses of study will be liberal and general in character. Indeed, guaranties were asked and assurances were given in the course of the debates that specific vocational training would not be given in these schools but as Mr. Fisher pointed out:

It would not be to the interest of an educated democracy that there should be no connection between the education they were seeking in the schools and the lives they were to lead. At the same time he felt that education should be a great liberating force, that it should provide compensation against the sordid monotony which attached to so much of industrial life of the country by lifting the workers to a more elevated and pure atmosphere, and the board would be false to the purpose for which the bill was framed if it were to sanction a system in continuation schools in which due attention was not paid to the liberal aspects of education.

The attitude of the Workers' Education Association was somewhat the same in their declaration of a policy—

That the education in such schools should be directed solely toward the full development of the bodies, minds, and character of the pupils; that it should therefore be intimately related to the environment and interests of the pupils and should contain ample provision for physical well-being.

Under the freedom permitted by the procedure through schemes, considerable latitude will be permitted to local authorities to adapt the courses to local conditions. The vocations will no doubt furnish a starting point for such courses of instruction. The Report of the Departmental Committee on Juvenile Education¹ contains some suggestions on the organization of the curriculum of continuation schools. Instruction should in no case be too narrowly technical, and the curriculum should maintain a proper balance between the technical and humanistic elements, since the primary function of education is to prepare for citizenship. A four-year course should be divided into equal stages, of which the first will be mainly general,

¹ See pp. 222.

and the second technical and vocational. The common ground for all in the first stage should be English subjects, including not only literature but geography and social and industrial history. The remaining subjects should be mathematics, manual training, science, each varied to suit the needs and the occupational interests of the students, and physical training. Only in the second stage would the curriculum be definitely founded on the chief vocational groups—agriculture, engineering, building, mining, textiles, the technical industries, commercial occupations, and domestic occupations. But even in the second stage the committee urges that technical subjects might be included as a medium of education and not as a means of production. In general the emphasis should be placed on social, historical, and economic elements in the subjects adopted in both stages. Steps have already been taken, as, for example, at the University of Manchester, to furnish special courses for training teachers for continuation schools. For the present there is some danger that a false start may be made by appointing teachers whose sole experience has been in elementary or secondary schools. However that may be, the point that needs to be emphasized here is that the criticism that has been leveled against Mr. Fisher's compromise is not valid, and that the continuation school with compulsory attendance required up to the age of 18 will be an accomplished fact at the close of the seven years of the postponement. It is significant that this is the only point that has been subjected to serious criticism.

The true estimate of the act may be reached by comparing it with the suggestions and recommendations of the bodies referred to on pp. 70ff; those which have not been incorporated in the act can be provided for by the Board of Education by its administrative regulations; others look too far into the future. It must be borne in mind that the act is but a first step, giving local authorities power to expand their educational activities. However desirable such proposals may be, the time is not ripe for the abolition of fees in secondary schools and for establishing an entirely free system of higher education or for the payment by the State of grants equal to 75 per cent of the local expenditure on education or to require 20 hours' attendance a week at continuation schools. Other suggestions will probably never be adopted in England; it is unlikely, for example, that the State will assume the direct payment of teachers' salaries, and, as a consequence, the establishment of the teaching profession as a branch of the civil service; it is improbable too that teachers will be placed on education committees to any large extent, especially as joint councils may be set up under the Whitley committee's recommendations. Technical education, university education, adult education, and the training of teachers still remain problems that the Government must shortly

consider, but, important though they are, these problems are not such as could be legislated upon at the present crisis.

The act has been variously hailed as the children's charter and as the Nation's charter. Certainly it inaugurates a new era as embodying "the first real attempt ever made in this country (England) to lay broad and deep the foundations of a scheme of education which would be truly national." Of much greater significance for the future of English democracy is the fact that the act is an attempt to provide the foundations of an education for the great mass of young citizens which, to quote Mr. Fisher, is "adequate to the new, serious, and enduring liabilities which the development of this great world war creates for our Empire or to the new civic burdens which we are imposing upon millions of our people." But whatever the merits of the act may be, it should not escape attention that the English Government and the English people did not consider it incompatible with the successful conduct of the war to divert some attention to the more pressing domestic problems of the present and the immediate future. Education is but part of the broader program for reconstruction after the war that is already being considered in England and whose scope is defined in the following words by the war cabinet in its report for 1917:

It is, indeed, becoming more and more apparent that reconstruction is not so much a question of rebuilding society as it was before the war, but of molding a better world out of the social and economic conditions which have come into being during the war.

EDUCATION ACT, 1918.

[8 and 9 Geo. 5. Ch. 39.]

ARRANGEMENT OF SECTIONS.

National System of Public Education.

Sec.

1. Progressive and comprehensive organization of education.
2. Development of education in public elementary schools.
3. Establishment of continuation schools.
4. Preparation and submission of schemes.
5. Approval of schemes by Board of Education.
6. Provisions as to cooperation and combination.
7. Provision as to amount of expenditure for education.

Attendance at School and Employment of Children and Young Persons.

8. Provisions as to attendance at elementary schools.
9. Provisions for avoidance of broken school terms.
10. Compulsory attendance at continuation schools.
11. Enforcement of attendance at continuation schools.
12. Administrative provisions relating to continuation schools.
13. Amendment of 3 Edw. 7, c. 45, and 4 Edw. 7, c. 15.
14. Prohibition against employment of children in factories, workshops, mines, and quarries.
15. Further restrictions on employment of children.
16. Penalties on illegal employment of children and young persons.

Extension of Powers and Duties.

17. Power to promote social and physical training.
18. Medical inspection of schools and educational institutions.

See.

- ✓19. Nursery schools.
- 20. Education of physically defective and epileptic children.
- 21. Powers for the education of children in exceptional circumstances.
- 22. Amendment of Education (Choice of Employment) Act, 1910.
- ✓23. Power to aid research.
- 24. Provision of maintenance allowances.
- 25. Provisions as to medical treatment.

Abolition of Fees in Public Elementary Schools.

- ✓26. Abolition of fees in public elementary schools.

Administrative Provisions.

- ✓27. Voluntary inspection of schools.
- ✓28. Collection of information respecting schools.
- ✓29. Provisions with respect to appointment of certain classes of teachers.
- 30. Provisions as to closing of schools.
- 31. Grouping of nonprovided schools of the same denominational character.
- 32. Provisions relating to central schools and classes.
- 33. Saving for certain statutory provisions.
- 34. Acquisition of land by local education authority.
- 35. Power to provide elementary schools outside area.
- 36. Amendments with respect to the allocation of expenses to particular areas.
- 37. Provisions as to expenses of Provisional Orders, etc.
- 38. Expenses of education meetings, conferences, etc.
- 39. Power to pay expenses of prosecution for cruelty.
- 40. Public inquiries by Board of Education.
- 41. Inspection of minutes.
- 42. Payments to the Central Welsh Board.
- 43. Evidence of certificates, etc., issued by local education authorities.

Education Grants.

- ✓44. Education grants.

Educational Trusts.

- 45. Power to constitute official trustees of educational trust property.
- 46. Exemption of assurance of property for educational purposes from certain restrictions under the Mortmain Acts.
- 47. Appointment of new trustees under scheme.

General.

- 48. Definitions.
- 49. Compensation to existing officers.
- 50. Extension of certain provisions of the education acts.
- 51. Repeals.
- 52. Short title, construction, extent, and commencement.

CHAPTER. 39.

An Act to make further provision with respect to education in England and Wales and for purposes connected therewith. [8th August 1918.]

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

National System of Public Education.

1. With a view to the establishment of a national system of public education available for all persons capable of profiting thereby, it shall be the duty of the council of every county and county borough, so far as their powers extend, to contribute thereto by providing for the progressive development and com-

prehensive organization of education in respect of their area, and with that object any such council from time to time may, and shall when required by the Board of Education, submit to the board schemes showing the mode in which their duties and powers under the education acts are to be performed and exercised, whether separately or in cooperation with other authorities.

2. (1) It shall be the duty of a local education authority so to exercise their powers under Part III of the Education Act, 1902, as—

(a) To make, or otherwise to secure, adequate and suitable provision by means of central schools, central or special classes, or otherwise—

(i) For including in the curriculum of public elementary schools, at appropriate stages, practical instruction suitable to the ages, abilities, and requirements of the children; and

(ii) For organizing in public elementary schools courses of advanced instruction for the older or more intelligent children in attendance at such schools, including children who stay at such schools beyond the age of 14;

(b) To make, or otherwise to secure, adequate and suitable arrangements under the provisions of paragraph (b) of subsection (1) of section 13 of the Education (Administrative Provisions) Act, 1907, for attending to the health and physical condition of children educated in public elementary schools; and

(c) To make, or otherwise to secure, adequate and suitable arrangements for cooperating with local education authorities for the purposes of Part II of the Education Act, 1902, in matters of common interest, and particularly in respect of—

(i) The preparation of children for further education in schools other than elementary, and their transference at suitable ages to such schools; and

(ii) The supply and training of teachers;

and any such authority from time to time may, and shall when required by the Board of Education, submit to the board schemes for the exercise of their powers as an authority for the purposes of Part III of the Education Act, 1902.

(2) So much of the definition of the term "elementary school" in section three of the Elementary Education Act, 1870, as requires that elementary education shall be the principal part of the education there given, shall not apply to such courses of advanced instruction as aforesaid.

3. (1) It shall be the duty of the local education authority for the purposes of Part II of the Education Act, 1902, either separately or in cooperation with other local education authorities, to establish and maintain, or secure the establishment and maintenance under their control and direction, of a sufficient supply of continuation schools in which suitable courses of study, instruction, and physical training are provided without payment of fees for all young persons resident in their area who are, under this act, under an obligation to attend such schools.

(2) For the purposes aforesaid the local education authority from time to time may, and shall when required by the Board of Education, submit to the board schemes for the progressive organization of a system of continuation schools, and for securing general and regular attendance thereat, and in preparing schemes under this section the local education authority shall have regard to the desirability of including therein arrangements for cooperation with universities in the provision of lectures and classes for scholars for whom instruction by such means is suitable.

(3) The council of any county shall, if practicable, provide for the inclusion of representatives of education authorities for the purposes of Part III of the Education Act, 1902, in any body of managers of continuation schools within the area of those authorities.

4. (1) The council of any county, before submitting a scheme under this act, shall consult the other authorities within their county (if any) who are authorities for the purposes of Part III of the Education Act, 1902, with reference to the mode in which and the extent to which any such authority will cooperate with the council in carrying out their scheme, and when submitting their scheme shall make a report to the Board of Education as to the co-operation which is to be anticipated from any such authority, and any such authority may, if they so desire, submit to the board as well as to the council of the county any proposals or representations relating to the provision or organization of education in the area of that authority for consideration in connection with the scheme of the county.

(2) Before submitting schemes under this act a local education authority shall consider any representations made to them by parents or other persons or bodies of persons interested, and shall adopt such measures to ascertain their views as they consider desirable, and the authority shall take such steps to give publicity to their proposals as they consider suitable, or as the Board of Education may require.

(3) A local education authority in preparing schemes under this act shall have regard to any existing supply of efficient and suitable schools or colleges not provided by local education authorities, and to any proposals to provide such schools or colleges.

(4) In schemes under this act adequate provision shall be made in order to secure that children and young persons shall not be debarred from receiving the benefits of any form of education by which they are capable of profiting through inability to pay fees.

5. (1) The Board of Education may approve any scheme (which term shall include an interim, provisional, or amending scheme) submitted to them under this act by a local education authority, and thereupon it shall be the duty of the local education authority to give effect to the scheme.

(2) If the Board of Education are of opinion that a scheme does not make adequate provision in respect of all or any of the purposes to which the scheme relates, and the board are unable to agree with the authority as to what amendments should be made in the scheme, they shall offer to hold a conference with the representatives of the authority and, if requested by the authority, shall hold a public inquiry in the matter.

(3) If thereafter the Board of Education disapprove a scheme, they shall notify the authority, and, if within one month after such notification an agreement is not reached, they shall lay before Parliament the report of the public inquiry (if any) together with a report stating their reasons for such disapproval and any action which they intend to take in consequence thereof by way of withholding or reducing any grants payable to the authority.

6. (1) For the purpose of performing any duty or exercising any power under the education acts, a council having powers under those acts may enter into such arrangements as they think proper for cooperation or combination with any other council or councils having such powers, and any such arrangement may provide for the appointment of a joint committee or a joint body of managers, for the delegation to that committee or body of managers of any powers or duties of the councils (other than the power of raising a rate or borrowing money), for the proportion of contributions to be paid by each coun-

cll, and for any other matters which appear necessary for carrying out the arrangement.

(2) The Board of Education may, on the application of two or more councils having powers under the education acts, by scheme provide for the establishment and (if thought fit) the incorporation of a federation for such purposes of any such arrangements as aforesaid as may be specified in the scheme as being purposes relating to matters of common interest concerning education which it is necessary or convenient to consider in relation to areas larger than those of individual education authorities, and the powers conferred on councils by this section shall include power to arrange for the performance of any educational or administrative functions by such a federation as if it were a joint committee or a joint body of managers: *Provided*, That no council shall without its consent be included in a scheme establishing a federation, and no council shall be obliged to continue in a federation except in accordance with the provisions of a scheme to which it has consented.

(3) A scheme made by the Board of Education constituting a federation, and an arrangement establishing a joint committee or a joint body of managers, shall provide for the appointment of at least two-thirds of the members by councils having powers under the education acts, and may provide either directly or by cooperation for the inclusion of teachers or other persons of experience in education and of representatives of universities or other bodies.

(4) A scheme constituting a federation may on the application of one or more of the councils concerned be modified or repealed by a further scheme, and, where a scheme provides for the discontinuance of a federation, provision may be made for dealing with any property or liabilities of the federation.

(5) Where any arrangement under this section provides for the payment of an annual contribution by one council to another, the contribution shall, for the purposes of section 19 of the Education Act, 1902, form part of the security on which money may be borrowed under that section.

7. The limit under section 2 of the Education Act, 1902, on the amount to be raised by the council of a county out of rates for the purpose of education other than elementary shall cease to have effect.

Attendance at School and Employment of Children and Young Persons.

8. (1) Subject as provided in this act, no exemption from attendance at school shall be granted to any child between the ages of 5 and 14 years, and any enactment giving a power, or imposing a duty, to provide for any such exemption, and any provision of a by-law providing for any such exemption, shall cease to have effect, without prejudice to any exemptions already granted. Any by-law which names a lower age than 14 as the age up to which a parent shall cause his child to attend school shall have effect as if the age of 14 were substituted for that lower age.

(2) In section 74 of the Elementary Education Act, 1870, as amended by section 6 of the Elementary Education Act, 1900, 15 years shall be substituted for 14 years as the maximum age up to which by-laws relating to school attendance may require parents to cause their children to attend school, and any such by-law requiring attendance at school of children between the ages of 14 and 15 may apply either generally to all such children, or to children other than those employed in any specified occupations: *Provided*, That it shall be lawful for a local education authority to grant exemption from the obligation to attend school to individual children between the ages of 14 and 15 for such time and upon such conditions as the authority think fit in any case where after due inquiry the circumstances seem to justify such an exemption.

(3) It shall not be a defense to proceedings relating to school attendance under the education acts or any by-laws made thereunder that a child is attending a school or institution providing efficient elementary instruction unless the school or institution is open to inspection either by the local education authority or by the Board of Education, and unless satisfactory registers are kept of the attendance of the scholars thereat.

(4) A local education authority may with the approval of the Board of Education make a by-law under section 74 of the Elementary Education Act, 1870, providing that parents shall not be required to cause their children to attend school or to receive efficient elementary instruction in reading, writing, and arithmetic before the age of 6 years: *Provided*, That in considering any such by-law the board shall have regard to the adequacy of the provision of nursery schools for the area to which the by-law relates, and shall, if requested by any 10 parents of children attending public elementary schools for that area, hold a public inquiry for the purpose of determining whether the by-law should be approved.

(5) Notwithstanding anything in the education acts the Board of Education may, on the application of the local education authority, authorize the instruction of children in public elementary schools till the end of the school term in which they reach the age of 16 or (in special circumstances) such later age as appears to the board desirable: *Provided*, That, in considering such application, the board shall have regard to the adequacy of the provision of nursery schools for the area to which under paragraphs (a) and (c) of subsection (1) of section 2 of this act and to the effective development and organization of all forms of education in the area, and to any representations made by the managers of schools.

(6) The power of a local education authority under section 7 of the Education Act, 1902, to give directions as to secular instruction shall include the power to direct that any child in attendance at a public elementary school shall attend during such hours as may be directed by the authority at any class, whether conducted on the school premises or not, for the purpose of practical or special instruction or demonstration, and attendance at such a class shall, where the local education authority so direct, be deemed for the purpose of any enactment or by-law relating to school attendance to be attendance at a public elementary school: *Provided*, That, if by reason of any such direction a child is prevented on any day from receiving religious instruction in the school at the ordinary time mentioned in the time-table, reasonable facilities shall be afforded, subject to the provisions of section 7 of the Elementary Education Act, 1870, for enabling such child to receive religious instruction in the school at some other time.

(7) In section 11 of the Elementary Education Act, 1876 (which relates to school attendance), for the words "there is not within 2 miles" there shall be substituted the words "there is not within such distance as may be prescribed by the bylaws."

(8) Nothing in this section shall affect the provisions of the Elementary Education (Blind and Deaf Children) Act, 1893, or the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914, relating to the attendance at school of the children to whom those acts apply.

9. (1) If a child who is attending or is about to attend a public elementary school or a school certified by the Board of Education under the Elementary Education (Blind and Deaf Children) Act, 1893, or the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914, attains any year of age during the school term, the child shall not, for the purpose of any enactment or

by-law, whether made before or after the passing of this act, relating to school attendance, be deemed to have attained that year of age until the end of the term.

(2) The local education authority for the purposes of Part III of the Education Act, 1902, may make regulations with the approval of the Board of Education providing that a child may, in such cases as are prescribed by the regulations, be refused admission to a public elementary school or such certified school as aforesaid except at the commencement of a school term.

10. (1) Subject as hereinafter provided, all young persons shall attend such continuation schools at such times, on such days, as the local education authority of the area in which they reside may require, for 320 hours in each year, distributed as regards times and seasons as may best suit the circumstances of each locality, or, in the case of a period of less than a year, for such number of hours distributed as aforesaid as the local education authority, having regard to all the circumstances, consider reasonable: *Provided, That—*

(a) The obligation to attend continuation schools shall not, within a period of seven years from the appointed day on which the provisions of this section come into force, apply to young persons between the ages of 16 and 18, nor after that period to any young person who has attained the age of 16 before the expiration of that period; and

(b) During the like period, if the local education authority so resolve, the number of hours for which a young person may be required to attend continuation schools in any year shall be 280 instead of 320.

(2) Any young person—

(i) Who is above the age of 14 years on the appointed day; or

(ii) Who has satisfactorily completed a course of training for, and is engaged in, the sea service, in accordance with the provisions of any national scheme which may hereafter be established, by Order in Council or otherwise, with the object of maintaining an adequate supply of well-trained British seamen, or, pending the establishment of such scheme, in accordance with the provisions of any interim scheme approved by the Board of Education; or

(iii) Who is above the age of 16 years and either—

(a) Has passed the matriculation examination of a university of the United Kingdom or an examination recognized by the Board of Education for the purposes of this section as equivalent thereto; or

(b) Is shown to the satisfaction of the local education authority to have been up to the age of 16 under full-time instruction in a school recognized by the Board of Education as efficient or under suitable and efficient full-time instruction in some other manner, shall be exempt from the obligation to attend continuation schools under this act unless he has informed the authority in writing of his desire to attend such schools and the authority have prescribed what school he shall attend.

(3) The obligation to attend continuation schools under this act shall not apply to any young person—

(i) Who is shown to the satisfaction of the local education authority to be under full-time instruction in a school recognized by the Board of Education as efficient or to be under suitable and efficient full-time instruction in some other manner; or

(ii) Who is shown to the satisfaction of the local education authority to be under suitable and efficient part-time instruction in some other manner for a number of hours in the year (being hours during which if not exempted he might be required to attend continuation schools) equal to the number of hours during which a young person is required under this act to attend a continuation school.

(4) Where a school supplying secondary education is inspected by a British university, or in Wales or Monmouthshire by the Central Welsh Board, under regulations made by the inspecting body after consultation with the Board of Education, and the inspecting body reports to the Board of Education that the school makes satisfactory provision for the education of the scholars, a young person who is attending, or has attended, such a school shall for the purposes of this section be treated as if he were attending, or had attended, a school recognized by the Board of Education as efficient.

(5) If a young person who is or has been in any school or educational institution, or the parent of any such young person, represents to the board that the young person is entitled to exemption under the provisions of this section, or that the obligation imposed by this section does not apply to him, by reason that he is or has been under suitable and efficient instruction, but that the local education authority have unreasonably refused to accept the instruction as satisfactory, the Board of Education shall consider the representation, and, if satisfied that the representation is well founded, shall make an order declaring that the young person is exempt from the obligation to attend a continuation school under this act for such period and subject to such conditions as may be named in the order: *Provided*, That the Board of Education may refuse to consider any such representation unless the local education authority or the Board of Education are enabled to inspect the school or educational institution in which the instruction is or has been given.

(6) The local education authority may require, in the case of any young person who is under an obligation to attend a continuation school, that his employment shall be suspended on any day when his attendance is required, not only during the period for which he is required to attend the school, but also for such other specified part of the day, not exceeding two hours, as the authority consider necessary in order to secure that he may be in a fit mental and bodily condition to receive full benefit from attendance at the school: *Provided*, That if any question arises between the local education authority and the employer of a young person whether a requirement made under this subsection is reasonable for the purposes aforesaid, that question shall be determined by the Board of Education, and if the Board of Education determine that the requirement is unreasonable, they may substitute such other requirement as they think reasonable.

(7) The local education authority shall not require any young person to attend a continuation school on a Sunday, or on any day or part of a day exclusively set apart for religious observance by the religious body to which he belongs, or during any holiday or half holiday to which by any enactment regulating his employment or by agreement he is entitled, nor so far as practicable during any holiday or half holiday which in his employment he is accustomed to enjoy, nor between the hours of 7 in the evening and 8 in the morning: *Provided*, That the local education authority may, with the approval of the board, vary those hours in the case of young persons employed at night or otherwise employed at abnormal times.

(8) A local education authority shall not, without the consent of a young person, require him to attend any continuation school held at or in connection with the place of his employment. The consent given by a young person for the purpose of this provision may be withdrawn by one month's notice in writing sent to the employer and to the local education authority.

Any school attended by a young person at or in connection with the place of his employment shall be open to inspection either by the local education

authority or by the Board of Education at the option of the person or persons responsible for the management of the school.

(9) In considering what continuation school a young person shall be required to attend a local education authority shall have regard, as far as practicable, to any preference which a young person or the parent of a young person under the age of 16 may express, and if a young person or the parent of a young person under the age of 16 represents in writing to the local education authority that he objects to any part of the instruction given in the continuation school which the young person is required to attend, on the ground that it is contrary or offensive to his religious belief, the obligation under this act to attend that school for the purpose of such instruction shall not apply to him, and the local education authority shall, if practicable, arrange for him to attend some other instruction in lieu thereof or some other school.

11. (1) If a young person fails, except by reason of sickness or other unavoidable cause, to comply with any requirement imposed upon him under this act for attendance at a continuation school, he shall be liable on summary conviction to a fine not exceeding 5 shillings, or in the case of a second or subsequent offense to a fine not exceeding £1.

(2) If a parent of a young person has condoned to or connived at the failure on the part of the young person to attend a continuation school as required under this act, he shall, unless an order has been made against him in respect of such failure under section 90 of the Children Act, 1908, be liable on summary conviction to a fine not exceeding £2, or in the case of a second or subsequent offense, whether relating to the same or another young person, to a fine not exceeding £5.

12. (1) The Board of Education may from time to time make regulations prescribing the manner and form in which notice is to be given as to the continuation school (if any) which a young person is required to attend, and the times of attendance thereat, and as to the hours during which his employment must be suspended, and providing for the issue of certificates of age, attendance, and exemption, and for the keeping and preservation of registers of attendance, and generally for carrying into effect the provisions of this act relating to continuation schools.

(2) For the purposes of the provisions of this act relating to continuation schools, the expression "year" means in the case of any young person the period of 12 months reckoned from the date when he ceased to be a child, or any subsequent period of 12 months.

13. (1) The Employment of Children Act, 1903, so far as it relates to England and Wales, shall be amended as follows:

(1) For subsection (1) of section 3 the following subsection shall be substituted:

"A child under the age of 12 shall not be employed; and a child of the age of 12 or upward shall not be employed on any Sunday for more than two hours, or on any day on which he is required to attend school before the close of school hours on that day, nor on any day before 6 o'clock in the morning or after 8 o'clock in the evening: *Provided*, That a local authority may make a by-law permitting, with respect to such occupations as may be specified, and subject to such conditions as may be necessary to safeguard the interests of the children, the employment of children of the age of 12 or upward before school hours, and the employment of children by their parents, but so that any employment permitted by by-law on a school day before 9 in the morning shall be limited to one hour, and that if a child is so employed

before 9 in the morning he shall not be employed for more than one hour in the afternoon."

- (ii) In subsection (2) of section 3, which prohibits the employment of a child under the age of 11 years in street trading, the words "under the age of 11 years," shall be repealed.
- (iii) For section 12 the following section shall be substituted:

"Except as regards the City of London, the powers and duties of a local authority under this act shall be deemed to be powers and duties under Part III, of the Education Act, 1902, and the provisions of the education acts for the time being in force with regard to those powers and duties and as to the manner in which the expenses of an authority under that part of that act shall be paid shall apply accordingly":
- (iv) For the definition of the expression "local authority" there shall be substituted the following definition:

"The expression 'local authority' means in the case of the City of London the mayor, aldermen, and commons of that city in common council assembled and elsewhere the local education authority for the purposes of Part III of the Education Act, 1902."
- (2) The Prevention of Cruelty to Children Act, 1904, so far as it relates to England and Wales, shall be amended as follows:
 - (i) In paragraph (b) of section 2, which restricts the employment of boys under the age of 14 years and of girls under the age of 16 years for the purpose of singing, playing, or performing, or being exhibited for profit, or offering anything for sale, between 9 p. m. and 6 a. m., "8 p. m." shall be substituted for "9 p. m." so far as relates to children under 14 years of age;
 - (ii) In paragraph (c) of section 2, which restricts the employment of children under 11 years for the purpose of singing, playing, or performing, or being exhibited for profit, or offering anything for sale, 12 years shall be substituted for 11 years;
 - (iii) In section 3, which relates to licenses for the employment of children exceeding 10 years of age, the age of 12 years shall be substituted for the age of 10 years;
 - (iv) A license under section 3 to take part in any entertainment or series of entertainments, instead of being granted, varied, added to, or rescinded as provided by that section, shall be granted by the local education authority for the purposes of Part III of the Education Act, 1902, of the area in which the child resides, subject to such restrictions and conditions as are prescribed by rules made by the Board of Education, and may be rescinded by the authority of any area in which it takes effect or is about to take effect if the restrictions and conditions of the license are not observed, and, subject as aforesaid, may be varied or added to by that authority at the request of the holder of the license;
 - (v) The holder of a license shall at least seven days before a child takes part in any entertainment or series of entertainments furnish the local education authority of the area in which the entertainment is to take place with particulars of the license and such other information as the Board of Education may by rules prescribe, and if he fails to furnish such particulars and information as aforesaid, he shall be liable on summary conviction to a fine not exceeding £5.
 - (vi) Subsections (3) and (4) if section 3 shall cease to apply with respect to licenses to take part in an entertainment or series of entertainments;

- (vii) If the applicant for a license or a person to whom a license has been granted feels aggrieved by any decision of a local education authority, he may appeal to the Board of Education, who may thereupon exercise any of the powers conferred on a local education authority by this section.
- (viii) The provisions of this subsection shall not apply to any license in force on the appointed day.
- (ix) References to the Employment of Children Act, 1903, shall be construed as references to that act as amended by this act.
- 14. No child within the meaning of this act shall be employed—
 - (a) In any factory or workshop to which the Factory and Workshop Acts, 1901 to 1911, apply; or
 - (b) In any mine to which the Coal Mines Act, 1911, applies; or
 - (c) In any mine or quarry to which the Metalliferous Mines Acts, 1872 and 1875, apply;

unless lawfully so employed on the appointed day; and those acts, respectively, shall have effect as respects England and Wales as if this provision, so far as it relates to the subject matter thereof, was incorporated therewith.

15. (1) The local education authority, if they are satisfied by a report of the school medical officer or otherwise that any child is being employed in such a manner as to be prejudicial to his health or physical development, or to render him unfit to obtain the proper benefit from his education, may either prohibit, or attach such conditions as they think fit to, his employment in that or any other manner, notwithstanding that the employment may be authorized under the other provisions of this act or any other enactment.

(2) It shall be the duty of the employer and the parent of any child who is in employment, if required by the local education authority, to furnish to the authority such information as to his employment as the authority may require, and, if the parent or employer fails to comply with any requirement of the local education authority or willfully gives false information as to the employment, he shall be liable on summary conviction to a fine not exceeding 40 shillings.

16. If any person—

- (a) Employs a child in such a manner as to prevent the child from attending school according to the education acts and the by-laws in force in the district in which the child resides; or
- (b) Having received notice of any prohibition or restriction as to the employment of a child issued by a local education authority under this act, employs a child in such a manner as to contravene the prohibition or restriction; or
- (c) Employs a young person in such a manner as to prevent the young person attending a continuation school which he is required to attend under this act; or
- (d) Employs a young person at any time when, in pursuance of any requirement under this act issued by a local education authority, the employment of that young person must be suspended;

he shall be deemed to have employed the child or young person in contravention of the Employment of Children Act, 1903, and subsections (1) and (2) of section 5 and section 6 and section 8 of that act shall apply accordingly as if they were herein reenacted and in terms made applicable to children and young persons within the meaning of this act as well as to children within the meaning of that act.

Extension of Powers and Duties.

17. For the purpose of supplementing and reinforcing the instruction and social and physical training provided by the public system of education, and without prejudice to any other powers, a local education authority for the purposes of Part III of the Education Act, 1902, as respects children attending public elementary schools, and a local education authority for the purposes of Part II of that act as respects other children and young persons and persons over the age of 18 attending educational institutions may, with the approval of the Board of Education, make arrangements to supply or maintain or aid the supply or maintenance of—

- (a) Holiday or school camps, especially for young persons attending continuation schools;
- (b) Centers and equipment for physical training, playing fields (other than the ordinary playgrounds of public elementary schools not provided by the local education authority), school baths, school swimming baths;
- (c) Other facilities for social and physical training in the day or evening.

18. (1) The local education authority for the purposes of Part II of the Education Act, 1902, shall have the same duties and powers with reference to making provision for the medical inspection and treatment of children and young persons attending—

- (i) Secondary schools provided by them;
- (ii) Any school to the governing body of which, in pursuance of any scheme made under the Welsh Intermediate Education Act, 1889, any payments are made out of any general fund administered by a local education authority as a governing body under that act, and any school of which a local education authority are the governing body under that act;
- (iii) Continuation schools under their direction and control; and
- (iv) Such other schools or educational institutions (not being elementary schools) provided by them as the board direct;

as a local education authority for the purposes of Part III of the Education Act, 1902, have under paragraph (b) of subsection (1) of section 13 of the Education (Administrative Provisions) Act, 1907, with reference to children attending public elementary schools, and may exercise the like powers as respects children and young persons attending any school or educational institution, whether aided by them or not, if so requested by or on behalf of the persons having the management thereof.

(2) The Local Education Authorities (Medical Treatment) Act, 1909, shall apply where any medical treatment is given in pursuance of this section as it applies to treatment given in pursuance of section 13 of the Education (Administrative Provisions) Act, 1907.

19. (1) The powers of local education authorities for the purposes of Part III of the Education Act, 1902, shall include power to make arrangements for—

- (a) Supplying or aiding the supply of nursery schools (which expression shall include nursery classes) for children over 2 and under 5 years of age, or such later age as may be approved by the Board of Education, whose attendance at such a school is necessary or desirable for their healthy physical and mental development; and
- (b) Attending to the health, nourishment, and physical welfare of children attending nursery schools.

(2) Notwithstanding the provisions of any act of Parliament the Board of Education may, out of moneys provided by Parliament, pay grants in aid of

nursery schools, provided that such grants shall not be paid in respect of any such school unless it is open to inspection by the local education authority, and unless that authority are enabled to appoint representatives on the body of managers to the extent of at least one-third of the total number of managers, and before recognizing any nursery school the board shall consult the local education authority.

20. A local education authority shall make arrangements under the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914, for ascertaining what children in their area are physically defective or epileptic within the meaning of those acts, and the provisions of the Elementary Education (Defective and Epileptic Children) Act, 1914, relating to mentally defective children, shall be extended so as to apply to physically defective and epileptic children, and accordingly that act shall have effect as if references therein to mentally defective children included references to physically defective and epileptic children.

21. Where a local education authority for the purposes of Part III of the Education Act, 1902, are satisfied in the case of any children that, owing to the remoteness of their homes or the conditions under which the children are living, or other exceptional circumstances affecting the children, those children are not in a position to receive the full benefit of education by means of the ordinary provision made for the purpose by the authority, the authority may, with the approval of the Board of Education, make such arrangements, either of a permanent or temporary character, and including the provision of board and lodging, as they think best suited for the purpose of enabling those children to receive the benefit of efficient elementary education, and may for that purpose enter into such agreement with the parent of any such child as they think proper: *Provided*, That where a child is boarded out in pursuance of this section the local education authority shall, if possible, and, if the parent so requests, arrange for the boarding out being with a person belonging to the religious persuasion of the child's parents.

22. Section 1 of the Education (Choice of Employment) Act, 1910, which confers on certain local education authorities the power of assisting boys and girls with respect to the choice of employment, shall have effect as if "18 years of age" were therein substituted for "17 years of age."

23. With a view to promoting the efficiency of teaching and advanced study, a local education authority for the purposes of Part II of the Education Act, 1902, may aid teachers and students to carry on any investigation for the advancement of learning or research in or in connection with an educational institution, and with that object may aid educational institutions.

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25. A local education authority shall not, in exercise of the powers conferred upon them by paragraph (b) of subsection (1) of section 13 of the Education (Administrative Provisions) Act, 1907, or by this act, establish a general domiciliary service of treatment by medical practitioners for children or young persons, and in making arrangements for the treatment of children and young persons a local education authority shall consider how far they can avail themselves of the services of private medical practitioners.

Abolition of Fees in Public Elementary Schools.

26. (1) No fees shall be charged or other charges of any kind made in any public elementary school, except as provided by the Education (Provision of Meals) Act, 1906, and the Local Education Authorities (Medical Treatment) Act, 1909.

(2) During a period of five years from the appointed day the Board of Education shall in each year, out of moneys provided by Parliament, pay to the managers of a school maintained but not provided by a local education authority in which fees were charged immediately before the appointed day, the average yearly sum paid to the managers under section 14 of the Education Act, 1902, during the five years immediately preceding the appointed day.

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Administrative Provisions.

27. If the governing body of any school or educational institution not liable to inspection by any Government department, or, if there is no governing body, the headmaster requests the Board of Education to inspect the school or institution and to report thereon, the Board of Education may do so, if they think fit, free of cost; but this section shall be without prejudice to the provisions relating to the Central Welsh Board contained in subsection (1) of section 3 of the Board of Education Act, 1899.

28. (1) In order that full information may be available as to the provision for education and the use made of such provision in England and Wales—

(a) It shall be the duty of the responsible person as hereinafter defined, in respect of every school or educational institution not in receipt of grants from the Board of Education, to furnish to the Board of Education in a form prescribed by the board—

(i) In the case of a school or educational institution existing at the appointed day, within three months of that day;

(ii) In the case of a school or educational institution opened after the appointed day, within three months of the opening thereof; the name and address of the school or institution and a short description of the school or institution;

(b) It shall be the duty of every such responsible person when required by the Board of Education to furnish to the board such further particulars with respect to the school or institution as may be prescribed by regulations made by the board:

Provided, That the board may exempt from both or either of the above obligations any schools or educational institutions with respect to which the necessary information is already in the possession of the board or is otherwise available.

(2) If the responsible person fails to furnish any information required by this section, he shall be liable on summary conviction to a penalty not exceeding £10, and to a penalty not exceeding £5 for every day on which the failure continues after conviction therefor.

(3) For the purposes of this section "the responsible person" means the secretary or person performing the duty of secretary to the governing body of the school or institution, or, if there is no governing body, the headmaster or person responsible for the management of the school or institution.

(4) Any regulations made by the Board of Education under this section with respect to the particulars to be furnished shall be laid before Parliament as soon as may be after they are made.

29. (1) Notwithstanding anything in the Education Act, 1902, the appointment of all teachers of secular subjects not attached to the staff of any particular public elementary school and teachers appointed for the purpose of giving practical instruction, pupil teachers, and student teachers, shall be made by the local education authority, and it is hereby declared that the local education authority have power to direct the managers of any public elementary

schools not provided by them to make arrangements for the admission of any such teachers to the schools.

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30. (1) The managers of a public elementary school not provided by the local education authority, if they wish to close the school, shall give 18 months' notice to the local education authority of their intention to close the school, and a notice under this provision shall not be withdrawn except with the consent of the local education authority.

(2) If the managers of a school who have given such a notice are unable or unwilling to carry on the school up to the expiration of the period specified in the notice, the schoolhouse shall be put at the disposal of the local education authority, if the authority so desire, for the whole or any part of the period, free of charge, for the purposes of a school provided by them, but subject to an obligation on the part of the authority to keep the schoolhouse in repair and to pay any outgoings in respect thereof, and to allow the use of the schoolhouse and the school furniture by the persons who were the managers of the school to the like extent and subject to the like conditions as if the school had continued to be carried on by those managers.

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31. Where there are two or more public elementary schools not provided by the local education authority of the same denominational character in the same locality, the local education authority, if they consider that it is expedient for the purpose of educational efficiency and economy, may, with the approval of the Board of Education, give directions for the distribution of the children in those schools according to age, sex, or attainments, and otherwise with respect to the organization of the schools; and for the grouping of the schools under one body of managers constituted in the manner provided by subsection (2) of section 12 of the Education Act, 1902: *Provided*, That, if the constitution of the body of managers fails to be determined by the Board of Education under that section, the board shall observe the principles and proportions prescribed by sections 6 and 11 of that act; and that, if the managers of a school affected by and directions given under this section request a public inquiry, the board shall hold a public inquiry before approving those directions.

32. (1) Notwithstanding the provisions of section 6 of the Education Act, 1902, or, in the case of London, subsection (1) of section 2 of the Education (London) Act, 1903, as to the appointment of managers, any public elementary school which in the opinion of the board is organized for the sole purpose of giving advanced instruction to older children may be managed in such manner as may be approved by the local education authority, and, in the case of a school not provided by that authority, also by the managers of the school.

(2) Notwithstanding anything contained in sections 6 and 8 of the Education Act, 1902, or in section 2 of the Education (London) Act, 1903, the provision of premises for classes in practical or advanced instruction for children attending from more than one public elementary school shall not be deemed to be the provision of a new public elementary school, and any class conducted in such premises may be managed in such manner as may be approved by the local education authority.

33. Except as expressly provided by this act, nothing in this act shall affect the provisions of the education acts relating to public elementary schools not provided by the local education authority or the provisions of Part II, of the Education Act, 1902.

34. (1) A local education authority may be authorized to purchase land compulsorily for the purpose of any of their powers or duties under the educa-

tion acts, by means of an order submitted to the Board of Education and confirmed by the board in accordance with the provisions contained in paragraphs (1) to (13) of the First Schedule to the Housing, Town Planning, etc., Act, 1909, and those provisions shall have effect for the purpose, with the substitution of the Board of Education for the local government board, of the local education authority for the local authority, and of references to the education acts for references to this act"; *Provided*, That the Board of Education shall not confirm any such order even when unopposed if they are of opinion that the land is unsuited for the purpose for which it is proposed to be acquired.

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(2) The powers given by this section in relation to the compulsory purchase of land by the local education authority shall be in substitution for any other powers existing for that purpose, but without prejudice to any powers conferred by any provisional order confirmed by Parliament before the appointed day.

35. A local education authority may, with the consent of the Board of Education, who shall consult the authority of the area in which the proposed site is situated, provide a public elementary school, in cases where it appears convenient to do so, on a site outside their area for the use of children within their area, and for the purposes of the education acts a school so provided shall be deemed to be situated within the area of the authority.

36. (1) It shall not be obligatory on a county council to charge on or raise within particular areas any portion of such expenses as are mentioned in paragraph (c) or paragraph (d) of subsection (1) of section 18 of the Education Act, 1902, and accordingly each of those paragraphs shall have effect as if for the word "shall" there was substituted the word "may" and as if the words "less than one-half or" were omitted therefrom; and, where before the passing of this act any portion of such expenses has been charged on or allocated to any area, the county council may cancel or vary the charge of allocation.

(2) Before charging any expenses under section 18 (1) (a) of the Education Act, 1902, on any area situate within a borough or urban district the council of which is an authority for the purposes of Part III of the Education Act, 1902, a county council shall consult the council of the borough or urban district concerned.

37. Any expenses incurred by a council in connection with any provisional order for the purposes of the education acts, or any order under this act for the purpose of the acquisition of land, shall be defrayed as expenses of the council under the Education Act, 1902, and the council shall have the same power of borrowing for the purpose of these expenses as they have under section 19 of the Education Act, 1902, for the purpose of the expenses therein mentioned.

38. Any council having powers under the education acts may, subject to regulations made by the Board of Education, defray as part of their expenses under those acts any reasonable expenses incurred by them in paying subscriptions toward the cost of, or otherwise in connection with, meetings or conferences held for the purpose of discussing the promotion and organization of education or educational administration, and the attendance of persons nominated by the council at any such meeting or conference: *Provided*, That—

- (a) The expenses of more than three persons in connection with any meeting or conference shall not be paid except with the previous sanction of the Board of Education;
- (b) Payments for traveling expenses and subsistence shall be in accordance with the scale adopted by the council;

- (c) Expenses shall not be paid in respect of any meeting or conference outside the United Kingdom unless the Board of Education have sanctioned the attendance of persons nominated by the council at the meeting or the conference;
- (d) No expenses for any purpose shall be paid under this section without the approval of the Board of Education, unless expenditure for the purpose has been specially authorized or ratified by resolution of the council, after special notice has been given to members of the council of the proposal to authorize or ratify the expenditure, or, where a council has delegated its powers under this section to the education committee, by resolution of that committee after like notice has been given to the members thereof.

39. The powers of a local education authority for the purposes of Part III of the Education Act, 1902, shall include a power to prosecute any person under section 12 of the Children Act, 1908, where the person against whom the offense was committed was a child within the meaning of this act, and to pay any expenses incidental to the prosecution.

40. (1) The Board of Education may hold a public inquiry for the purpose of the exercise of any of their powers or the performance of any of their duties under the education acts.

(2) The following provisions shall (except as otherwise provided by the education acts) apply to any public inquiry held by the Board of Education:

- (a) The board shall appoint a person or persons to hold the inquiry;
- (b) The person or persons so appointed shall hold a sitting or sittings in some convenient place in the neighborhood to which the subject of the inquiry relates, and thereat shall hear, receive, and examine any evidence and information offered, and hear and inquire into the objections or representations made respecting the subject matter of the inquiry, with power from time to time to adjourn any sitting;
- (c) Notice shall be published in such manner as the board direct of every such sitting, except an adjourned sitting, seven days at least before the holding thereof;
- (d) The person or persons so appointed shall make a report in writing to the board setting forth the result of the inquiry and the objections and representations, if any, made thereat, and any opinion or recommendations submitted by him or them to the board;
- (e) The board shall furnish a copy of the report to any local education authority concerned with the subject matter of the inquiry, and, on payment of such fee as may be fixed by the board, to any person interested;
- (f) The board may, where it appears to them reasonable that such an order should be made, order the payment of the whole or any part of the costs of the inquiry either by any local education authority to whose administration the inquiry appears to the board to be incidental, or by the applicant for the inquiry, and may require the applicant for an inquiry to give security for the costs thereof;
- (g) Any order so made shall certify the amount to be paid by the local education authority or the applicant, and any amount so certified shall, without prejudice to the recovery thereof as a debt due to the Crown, be recoverable by the board summarily as a civil debt from the authority or the applicant as the case may be.

41. The minutes of the proceedings of a local education authority, and, where a local education authority delegate to their education committee any powers

and the acts and proceedings of the education committee as respects the exercise of those powers are not required to be submitted to the council for their approval, the minutes of the proceedings of the education committee relating to the exercise of those powers shall be open to the inspection of any ratepayer at any reasonable time during the ordinary hours of business on payment of a fee of 1 shilling, and any ratepayer may make a copy thereof or take an extract therefrom.

42. (1) For the yearly sum payable to the Central Welsh Board under the scheme regulating the intermediate and technical education fund of any county, as defined by the Welsh Intermediate Education Act, 1889, there shall be substituted—

(a) A yearly sum equal to a percentage not exceeding $22\frac{1}{2}$ per cent fixed from time to time at a uniform rate for every county by the Central Welsh Board of the sum produced by a rate of 1 halfpenny in the pound for the preceding year, calculated in the manner provided by subsection (3) of section 8 of the Welsh Intermediate Education Act, 1889; and

(b) A yearly sum equal to 5 per cent of the net income for the preceding year of any endowment comprised in the intermediate and technical education fund of the county, or, in the alternative, for each year during such period as may be agreed with the Central Welsh Board, such yearly as that board may agree to accept in lieu thereof.

(2) For the purpose of ascertaining the said net income there shall be deducted from the gross income all proper expenses and outgoings in respect of administration and management of the endowment (including charges for interest on and repayment of loans and replacement of capital), and any sums required by the scheme to be treated as capital, and the term "endowment" shall include augmentations acquired by the investment of surplus income whether derived from endowment or county rate, or from any other source, but not property occupied for the purposes of the scheme.

(3) The power of charging capitation fees for scholars offered for examination conferred on the Central Welsh Board by the scheme of the 13th day of May, 1896, regulating the Central Welsh Intermediate Education Fund, shall cease.

(4) The provisions of this section shall have effect and be construed as part of the schemes regulating the Central Welsh Intermediate Education Fund and the intermediate and technical education funds of counties in Wales and Monmouthshire, and may be repealed or altered by future schemes accordingly.

43. All orders, certificates, notices, requirements, and documents of a local education authority under the education acts, if purporting to be signed by the clerk of the authority or of the education committee, or by the director of, or secretary for, education, shall until the contrary is provided be deemed to be made by the authority and to have been so signed, and may be proved by the production of a copy thereof purporting to have been so signed.

Educational Grants.

44. (1) The Board of Education shall, subject to the provisions of this act, by regulations provide for the payment to local education authorities out of moneys provided by Parliament of annual substantive grants in aid of education of such amount and subject to such conditions and limitations as may be prescribed in the regulations, and nothing in any act of Parliament shall prevent the Board of Education from paying grants to an authority in respect of any expenditure which the authority may lawfully incur.

(2) Subject to the regulations made under the next succeeding subsection, the total sums paid to a local education authority out of moneys provided by Parliament and the total taxation account in aid of elementary education or education other than elementary, as the case may be, shall not be less than one-half of the net expenditure of the authority recognized by the Board of Education as expenditure in aid of which parliamentary grants should be made to the authority, and, if the total sums payable out of those moneys to an authority in any year fall short of one-half of that expenditure, there shall be paid by the Board of Education to that authority, out of moneys provided by Parliament, a deficiency grant equal to the amount of the deficiency, provided that a deficiency grant shall not be so paid as to make good to the authority any deductions made from a substantive grant.

(3) The Board of Education may make regulations for the purpose of determining how the amount of any deficiency grant payable under this section shall be ascertained and paid, and those regulations, shall if the Treasury so direct, provide for the exclusion in the ascertainment of that amount of all or any sums paid by any Government department other than the Board of Education and of all or any expenditure which in the opinion of the Board of Education is attributable to a service in respect of which payments are made by a Government department other than the Board of Education.

* * * * *

(5) If, by reason of the failure of an authority to perform its duties under the education acts or to comply with the conditions on which grants are made, the deficiency grant is reduced or a deduction is made from any substantive grant exceeding £500 or the amount which would be produced by a rate of a halfpenny in the pound whichever is the less, the Board of Education shall cause to be laid before Parliament a report stating the amount of and the reasons for the reduction or deduction.

(6) Any regulations made by the Board of Education for the payment of grants shall be laid before Parliament as soon as may be after they are made.

Educational Trusts.

45. (1) His Majesty may by Order in Council constitute and incorporate with power to hold land without license in mortmain one or more official trustees of educational trust property, and may apply to the trustee or trustees so constituted the provisions of the Charitable Trusts Acts, 1853 to 1914, relating to the official trustee of charity lands and the official trustees of charitable funds so far as they relate to endowments which are held for or ought to be applied to educational purposes.

(2) On the constitution of an official trustee or official trustees of educational trust property—

(a) All land or estates or interests in land then vested in the official trustee of charity lands which are held by him as endowments for solely educational purposes, and

(b) All securities then vested in the official trustees of charitable funds which those trustees certify to be held by them as endowments for solely educational purposes,

shall by virtue of this act vest in the official trustee or trustees of educational trust property upon the trusts and for the purposes for which they were held by the official trustee of charity lands and the official trustees of charitable funds, and, on such a certificate by the official trustees of charitable funds as aforesaid being sent to the person having charge of the books or registers in

which any such securities are inscribed or registered, that person shall make such entries in the books or registers as may be necessary to give effect to this section.

(3) If any question arises as to whether an endowment or any part of an endowment is held for or ought to be applied to solely educational purposes, the question shall be determined by the Charity Commissioners.

(3) Every assurance of land or personal estate to be laid out in the purchase of land for educational purposes, including every assurance of land to any local authority for any educational purpose or purposes for which such authority is empowered by any act of Parliament to acquire land, shall be sent to the offices of the Board of Education in London for the purpose of being recorded in the books of the board as soon as may be after the execution of the deed or other instrument of assurance, or in the case of a will after the death of the testator.

47. Where, under any scheme made before the passing of this act relating to an educational charity, the approval of the Board of Education is required to the exercise by the trustees under the scheme of a power of appointing new trustees, the scheme shall, except in such cases as the board may otherwise direct, have effect as if no such approval was required thereunder, and the board may by order make such modifications of any such scheme as may be necessary to give effect to this provision.

General.

48. (1) In this act, unless the context otherwise requires—

The expression "child" means any child up to the age when his parents cease to be under an obligation to cause him to receive efficient elementary instruction or to attend school under the enactments relating to elementary education and the by-laws made thereunder;

The expression "young person" means a person under 18 years of age who is no longer a child;

The expression "parent" in relation to a young person includes guardian and every person who is liable to maintain or has the actual custody of the young person;

The expression "practical instruction" means instruction in cookery, laundry work, housewifery, dairy work, handicrafts, and gardening, and such other subjects as the board declare to be subjects of practical instruction;

The expression "school term" means the term as fixed by the local education authority;

The expression "sea service" has the same meaning as in the Merchant Shipping Acts, 1894 to 1916, and includes sea-fishing service;

Other expressions have the same meaning as in the education acts.

(2) In the education acts the expressions "employ" and "employment" used in reference to a child or young person, include employment in any labor exercised by way of trade or for the purposes of gain, whether the gain be to the child or young person or to any other person.

49. Section 120 of the Local Government Act, 1888, which relates to compensation to existing officers, shall apply to officers serving under local education authorities at the passing of this act, who, by virtue of this act or anything done in pursuance or in consequence of this act, suffer direct pecuniary loss by abolition of office or by diminution or loss of fees or salary, subject as follows:

(a) Teachers in public elementary schools maintained by a local education authority shall be deemed to be officers serving under that authority.

- (e) Any expenses shall be paid by the council under whom the officer was serving at the date when the loss arose out of the fund or rate out of which the expenses of the council under the education acts are paid, and, if any compensation is payable otherwise than by way of an annual sum, the payment of that compensation shall be a purpose for which a council may borrow for the purposes of those acts.

52. (1) This act may be cited as the Education Act, 1918, and shall be read as one with the Education Acts, 1870 to 1916, and those acts and this act may be cited together as the Education Acts, 1870 to 1918, and are in this act referred to as "the education acts."

(2) This act shall not extend to Scotland or Ireland.

(3) This act shall come into operation on the appointed day, and the appointed day shall be such day as the Board of Education may appoint and different days may be appointed for different purposes and for different provisions of this act, for different areas or parts of areas, and for different persons or classes of persons: *Provided*, That the appointed day for the purposes of subsections (1) and (2) of section 8 shall not be earlier than the termination of the present war, and for the purposes of paragraph (iii) of subsection (2) of section 13 shall not be earlier than three years after the passing of this act, and that for a period of seven years from the appointed day the duty of the council of a county (other than the London County Council) shall not include a duty to establish certified schools for boarding and lodging physically defective and epileptic children.

SCOTLAND.

THE SCHOOLS DURING THE WAR.

Education in Scotland passed through the same vicissitudes since the outbreak of the war as in England. The Scotch Department of Education, local school board managers, and teachers devoted much energy to minimizing the interference with education created by the new conditions, but the inevitable dislocation occurred. Many of the school buildings during the past two years continued to be under military occupation. This led to the introduction in many places of "double shifts," which, however, did not prove to be a satisfactory experiment educationally. The worst feature was a continuance of irregular attendance and of the granting of exemptions, especially in rural agricultural areas. The number of school boards granting no exemptions was 320 in 1913-14; 263 in 1914-15; 126 in 1915-16; and 112 in 1916-17.

The relaxation of discipline resulted in an increase of juvenile delinquency, which attracted the attention of all interested in the training of the young. Even allowing for the fact that many of the offenses which are statistically set down as crimes are only "childish pranks" or the "assertion of independence of control," the problem became serious. Here, as elsewhere, the establishment

of play centers, supported by Government grants, provided a means for redirecting the youthful energies into right channels. Other agencies such as scouts, brigades and clubs, employment agencies maintained by school boards, played their part in this crisis.

The greater prosperity of the country conduced to an improvement in the general welfare of the children, a fortunate circumstance in view of the difficulties involved in maintaining the school medical service on a normal basis. While there was a considerable decrease in the number of children medically inspected, there was an appreciable increase in the provision and expenditure for medical treatment.

The depletion in the number of available teachers was met by an increase in the size of classes, "by the continuance of teachers who had reached the age for retirement, by the temporary return of women teachers who had given up teaching on their marriage, and by the employment of a limited number of persons of good education likely to be of use in schools for which no technically qualified teacher was available." The output of the teachers' training colleges also appears to have been satisfactory. When the question of salaries became urgent, the Treasury agreed in 1916-17 "to allow a grant of one-half of the bonus paid by the managers, subject to a maximum grant of £5 in the case of teachers in receipt of salaries not exceeding £110 or of £4 in the case of teachers whose salaries exceeded £110 but did not exceed £160." The total grant paid in this way amounted to \$164,955. In the following year an additional grant of \$2,649,280 for education was made to Scotland, of which \$1,970,875 was devoted to the purpose of securing definite increases of salary to replace the bonus. With the amount added by school boards there accrued to teachers an average increase of \$90. For the year 1918-19 an additional appropriation was made by Parliament of \$2,000,000 for the improvement of teachers' salaries and pensions. In July, 1917, the department appointed a committee on the remuneration of teachers in Scotland, which issued a report later in the same year embodying proposed scales of salaries for teachers and other recommendations. (See pp. 112f.) The department also devoted part of the new grant to increasing the pensions of retired teachers to a minimum of \$260 a year.

Intermediate and secondary education showed increasing enrollment and increasing attendance. In 1914-15 the number of pupils in higher grade or intermediate schools was 29,488; in 1915-16, 30,699; and in 1916-17, 31,949. In the grant-earning secondary schools the enrollment in 1915 was 19,866; in 1915-16, 20,317; and in 1916-17, 21,012. Continuation classes and central institutions for technical instruction, both of which are normally attended by older pupils than the full-time intermediate and secondary schools, were adversely

affected by the war and showed considerable decrease in enrollment and attendance. The central institutions, however, directed their attention and resources to war work and also undertook the training of disabled soldiers and sailors in cooperation with local pension committees.

The total net ordinary expenditure of the school boards for 1914-15 was \$20,388,730 and the income \$20,853,725, of which \$9,387,005 came from the department. In 1915-16 all these items indicate an increase; the expenditure was \$20,534,460, the income \$21,098,730, and the department grant was \$9,454,905, a sum which was considerably increased in the following year by the extraordinary grant for the increase of salaries.

TEACHERS' SALARIES.¹

The effect of the war on salaries of teachers in Scotland was similar to that in England and Wales, with similar attempts to meet the situation by the grant of bonuses. In July, 1917, the Government appointed a departmental committee on the remuneration of teachers in Scotland² which considered and reported in November, 1917, on salaries in elementary and secondary schools, and in training colleges. The general considerations determining the report of the committee were as follows:

In considering the larger and more important part of our reference, viz, the suitable scales of salary for different classes of teachers, we desired to approach the question not solely, nor even mainly, as one involving the interests of a single profession, but as one vitally affecting the welfare of the whole community. That welfare must depend, in increasing measure, upon the efficiency of national education; and the fundamental requirement for securing this is that there should be an adequate supply of teachers of high capacity, proved aptitude, and thorough training. This can not be attained unless the remuneration is such as to make the teaching profession one which may compete with other professions in securing recruits of sufficient capacity, and in repaying these recruits for the time and labor spent in their special training. To attract such recruits it is necessary not only that a fair salary should be offered to begin with, but—and it is an even more vital condition—that sufficiently attractive prospects should be opened to those who have served for a certain number of years.

Following this line of inquiry the committee came to the following general conclusions:

1. That not only as a temporary war measure, but as a permanent necessity, in order to maintain an efficient teaching profession in the interests of the country, the general remuneration of teachers must be raised, and that an equalization of the scale of salaries for similar classes of schools over the country is desirable.

¹ See footnote, p. 57.

² Report of a Departmental Committee on the Remuneration of Teachers in Scotland, Edinburgh, 1917.

2. That this can not be attained by any continuation of or extension of the bonus system.

3. That, while an adequate initial salary must be provided, it is even of greater importance that improved prospects should be opened to those who attain a certain length of service, and have proved their competency and their aptitude for the profession.

4. That the scale should take account of—

(a) The length and character of the preliminary training.

(b) Length of service.

(c) The responsibility of the post held and its demands on the capacity and energy of a teacher.

The scales recommended by the committee are in every case higher than those prevailing at present and determined by local and accidental circumstances. While aware of the large increase of expenditure involved, the committee declares it to be its—

firm and considered conviction, however, that the scheme * * * can not be attained except, first, by an extension of school areas; and, secondly, by a very large proportion of the additional amount required being provided by the central authority. * * * Whatever the cost, if it is proved to be necessary for high educational efficiency, we can not afford the ultimate extravagance which is involved in undue parsimony in such a case. It should not be overlooked that the aim of the proposed standard of salaries * * * is not so much to improve the position and prospects of the teaching profession, as to secure in the future, for the benefit of the State, an adequate supply of amply efficient recruits for our educational army.

THE REFORM OF EDUCATION.

The demands for educational reorganization in Scotland have been as insistent as in England and were supported by the public and the teachers. The directions of desirable reforms were summarized in a report¹ of the Scottish education reform committee, an organization representing the Educational Institute, the Secondary Educational Association, and the Class Teachers' Federation. The attitude of the teachers on the desirability of a national program that would unify all branches of education on the basis of national needs is well indicated by the amalgamation of their three principal organizations in the Educational Institute. The professional solidarity thus attained offers a guarantee of educational progress. The education reform committee through a number of subcommittees issued recommendations on administration and finance, general education, the education of women, technical and university education, professional training and status, and moral education. The report is a valuable contribution, and, like similar reports in England, enriches educational thought and furnishes a firm foundation for future reconstruction.

¹ Reform in Scottish Education, being the Report of the Scottish Education Reform Committee. (Edinburgh, 1917.)

The committee urges the abolition of the parish school board system and the substitution of county councils and town councils, acting through education committees. Voluntary and endowed schools should be brought within the scope of the national system. For the purpose of coordinating local and central control of education the appointment is recommended of a national education council, consisting of representatives of (a) the Scotch Education Department; (b) local education authorities; (c) universities, provincial committees, central institutions; (d) teachers engaged in the various types of schools; (e) other legitimate interests. Such a body would make available the advice of experts on a larger scale than by means of the representation of teachers on the local education committees, which is also advocated. The nationalization of the educational system should, in the opinion of the committee, be stimulated by a revision of the methods of making grants, so that two main purposes will be promoted—the establishment of a national scale of salaries and the encouragement of progress by the assumption of a definite share of other approved expenditure. In addition to these two principles, special aid should be given to the highlands and the islands to equalize the burden of these poorer districts.

On the subject of school organization the committee emphasizes the need of medical inspection and treatment and other provisions for physical welfare. Attendance at school for full time should be made compulsory up to 15, and for part time up to 18. Recommendations are offered on the size of schools and classes. The curriculum should be reviewed in order to determine what subjects are indispensable and to eliminate what is merely traditional and nonessential. The time saved in this way, and by the simplification of spelling and by the introduction of the metric system and decimal coinage, could be utilized for practical work. Emphasis is placed on the importance of religious instruction and moral education, direct, indirect, and incidental, not only in and through the school, but also by the cooperation of all the influences affecting the life of children. "International polity should be one of the aims of moral education, and the ethical code of the individual ought, *mutatis mutandis*, to be that for the nation as well." Differentiation, of course, is urged to meet the needs of girls and of pupils in rural intermediate and secondary schools. Improvements are advocated in the system of external examinations.

Since "the key of all educational reform lies in the improvement of the status, training, conditions of service, and emoluments of the teacher," these subjects receive detailed consideration. The preliminary training of candidates for the profession should be the same as that of other students in secondary schools, and their admission to training colleges should be in the hands of a board of control repre-

senting the provincial committees and the training centers. The training colleges should be affiliated as professional schools with the universities in which the students should pursue their academic studies. The length of the training course should be three years for undergraduates and one year for graduates. Teachers should not be granted certificates before the age of 21, while two years' satisfactory service should be required for the final certificate. Greater freedom for the teachers and their representation on bodies administering education are measures suggested for the improvement both of their status and of education in general, to both of which a national scale of salaries and prospects for advancement to the inspectorate would contribute.

In discussing technical education the report considers the raising of the school leaving age to 15, and compulsory attendance at continuation classes fundamental to the efficiency of apprenticeship, which should be made obligatory wherever practicable. The cooperation of teachers and expert advisers in technical education, the coordination of efforts in the technical schools, central institutions, and universities, close relationships between the trades and technical education, and the promotion of scientific and industrial research are regarded as essential. Similar recommendations are made for commercial education. The universities should cooperate with secondary, technical, and commercial schools, and utilize by affiliation work in other institutions on a university level. More attention should be given to the teaching of pure and applied science, to modern languages, and to education by the establishment of a chair in this subject in each university. Greater autonomy among the universities and specialization of the various universities along different lines should be encouraged. Finally "a university should be the center of its educational area, and should lend all its resources and influence to the higher education of the working population," employing methods that have been attended with so much success in the organization of the Workers' Educational Association in England and the people's high schools in Denmark.

THE SCOTTISH EDUCATION BILL.

The need of some reorganization is perhaps greater in Scotland than in England, which, eliminating the smaller area, developed a sound administrative system in 1902. The remarkable educational tradition of the country has tended to retard the development of an administrative reform more suited to modern needs. Successful as this tradition has been in selecting talent and promoting boys of ability, it has not been effective in raising the general average. As in England, compulsory attendance laws were subject to local exemptions, voluntary measures for educating adolescent boys and girls

were not successful, and in many parts of the country accessible secondary schools were not provided. Under the existing system there are nearly 1,000 school boards elected *ad hoc* in the burghs and parishes; each voluntary and endowed school is under its own administrative authority; while secondary education since 1908 is administered by nearly 40 secondary school committees.

At the close of 1917 a bill to reduce this system to some more unified plan of organization was introduced in Parliament by the Secretary for Scotland. The bill followed the English administrative system somewhat—each county council and the councils of the five chief burghs (Edinburgh, Glasgow, Aberdeen, Dundee, and Leith), were to be the education authorities of their respective areas, assisted by district education committees and local school committees. This proposal met with considerable opposition, the fear being expressed that the administration of education would be reduced to the level of that of sewers, water, and gas. If the smaller local school board must surrender its functions to a board covering a wider area, that board, too, should be elected *ad hoc* and in this way make use of the accumulated experience of the older school board members. On August 6, 1918, a new bill was substituted, giving effect to this demand for *ad hoc* boards.

The central administration is to continue as hitherto in the hands of the Scotch Education Department, which is empowered to establish an advisory council consisting, to the extent of not less than two-thirds of its membership, of persons qualified to represent the interests of education. The function of the council will be to advise and make recommendations to the department.

The counties and the five large burghs are set up as education authorities administered by boards specially elected for the purpose by the local government electors. The number of electoral districts and the constitution of each education authority are to be determined by the Secretary for Scotland. Each education authority will be required to present a scheme for the approval of the Scotch Education Department for the establishment of school management committees, including a representative of the authority, one teacher, and local representatives, for the general management and supervision of schools, but without any financial powers.

The education authority will be required to raise money for education and control the expenditure; appoint, transfer, or dismiss teachers; establish or discontinue intermediate or secondary schools or control institutions for advanced technical instruction; and provide bursaries and facilitate attendance at secondary and higher schools. Further, the education authority is charged with the duty of preparing schemes for the adequate provision of free elementary, intermediate, and secondary schools, and for the support of certain

schools charging fees, and of drawing up schemes of scales of salaries on the basis of a minimum national scale recommended by a departmental committee. (See pp. 112f.)

Contributions must also be made by education authorities toward the maintenance of the training colleges for teachers in proportion to the number of fully qualified teachers in their areas, and aid may also be extended to central institutions and universities, provided reasonable representation on their governing bodies is granted. "As an ancillary means of promoting education" an authority may furnish books for general reading not only to children and young persons but also to adults, and in this service is to cooperate financially and otherwise with public libraries, where they exist. Each education authority is required to establish an advisory council of persons qualified to represent the interests of education, whose duty shall be to advise and make recommendations for the consideration of the authority. For the purpose of developing a national system of administration the bill permits the managers and trustees of voluntary or denominational schools to transfer such schools to the education authorities. A school so transferred will become a public school, receiving the same grants as a public school. The teachers of such a school must be taken over by the authority and paid the same scale of salaries as public-school teachers, provided that the department is satisfied with their qualifications and the church or denomination concerned with their religious character. The same time will be devoted after the transfer as before it to religious instruction, which is to be placed under an approved supervisor. Public grants will not be paid to voluntary schools not transferred to the education authorities within two years of the passing of the bill.

If it is found 10 years after the transfer has been made that the religious character of the district served by a transferred school has changed, such a school by authority of the department may become a public school in all respects. On the other hand, on the representation of parents as to the need of accommodation for the children of any denomination the department may approve the erection of new schools of the same character as a transferred school. This provision is likely to encounter the severest opposition. It is argued that every denomination except that which preponderates in Scotland would be enabled by the proposal to have its own sectarian belief propagated in schools maintained by public funds. The situation is similar to that established in England by the education act of 1902, and the history of education across the border since that date may help to remove the danger of organized opposition to the bill in general on the ground of this provision alone.

The schools are to be maintained by grants, loans, and an annual levy of an education rate to meet any deficiency that may occur.

The rate is to be apportioned to each parish in an educational area in accordance with the local valuations. The State grants will consist of the education fund established in 1908, an annual appropriation equal to the educational estimates for the financial year 1913-14, which is to be considered for purposes of the law as the standard year, and a sum equal to eleven-eightieths of the excess of the annual estimates for education in England and Wales over the sums expended in the standard year.

The bill provides for the establishment of nursery schools for children between the ages of 2 and 5, in which attention must be given to health, nourishment, and physical welfare. Compulsory school attendance begins at the age of 5 and is extended by the bill to the age of 15, the pupils entering and leaving school on definitely fixed dates. No exemptions from school attendance may be granted to pupils under the age of 13. Child labor on school days between the hours of 6 o'clock in the evening and 8 o'clock in the morning is entirely prohibited, and children between 13 and 15 may be employed only if definitely exempted from school attendance. Street trading by children under 17 is forbidden, while no child under 15 may be employed in factories, workshops, mines, or quarries.

Children leaving elementary schools at the age of 15, and not exempted by virtue of attendance at an intermediate or secondary school or of having reached the age of 17 and an equivalent educational standard, will be compelled, if the bill passes, to attend a continuation school up to the age of 18. For the present the compulsory age limit will be 16 within one year of the date on which the bill, if enacted, comes into operation, to be raised to 18 as soon thereafter as the department may decide. Attendance will be required between the hours of 8 o'clock in the morning and 7 o'clock in the evening for 320 hours a year without increasing the total period of employment permitted for young persons by Parliament.

The education authorities, who are permitted to delegate the management and supervision of continuation schools to school management committees or to appoint special committees for the purpose, on which they are represented, are required, after consultation with and with the cooperation of associations and committees of employers and workmen in commerce and trades, to draft schemes for continuation schools. Such schemes must include English language and literature and such other parts of a general education as may be deemed desirable, physical exercises, and special instruction intended to promote efficiency in the vocation in which the young persons may be engaged. Fines for irregular attendance are to be imposed on the young persons concerned and on employers who do not afford the necessary opportunity for regular and punctual attendance at continuation schools.

The bill makes no special provision for secondary or higher education, but authorities are indirectly required to increase the facilities by the provision that "no child or young person resident in their education area who is qualified for attendance at an intermediate or secondary school, and in their opinion shows promise of profiting thereby, shall be debarred therefrom by reason of the expense involved." An education authority is accordingly required to furnish the necessary assistance in such cases by the payment of fees, traveling expenses, scholarships, or maintenance allowances to encourage attendance not only at intermediate or secondary schools, but also at universities, teachers' training colleges, or central institutions for technical instruction.

The bill was passed in November, 1918. The amendment of the original plan of administration cleared one of the chief subjects of contention out of the way. Any obstacles that might have been raised to the enactment of the continuation school measure had already been removed by the discussions on the similar provision in the English act. The unanimous support of the teachers was assured by the refusal to grant recognition to any schools in which the minimum national scale of salaries has not been adopted. The only difficulty that remains, and one which has always proved a serious stumbling block, is the revival of the religious difficulty involved in the transfer of the voluntary schools. The probability is, however, that the national needs of the moment will prove sufficient to secure the solidarity necessary for the enactment of the bill.

EDUCATION (SCOTLAND) ACT, 1918.

[8 and 9 Geo. 5. Ch. 48.]

ARRANGEMENT OF SECTIONS.

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14. Extension of school age.
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18. Transfer of voluntary schools.

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31. Interpretation.

32. Provisions as to education authorities, school management committees, transfer, and modification and repeal of enactments.

33. Extent, commencement, citation, and construction.

CHAPTER 48.

An Act to make further provision with respect to education in Scotland and for purposes connected therewith. [21st November, 1918.]

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

Education Authorities.

1. A local authority for the purposes of education (in this act called the "education authority") shall be elected in and for each of the following areas (in this act called "education areas"), that is to say, in and for—

(a) Each of the burghs mentioned in the first schedule to this act (in this act called the "scheduled burghs"); and

(b) Every county, including every burgh situated therein not being one of the scheduled burghs.

2. (1) For the purpose of such elections, the Secretary for Scotland shall, as soon as may be after the passing of this act, by order divide each education area into electoral divisions, and in determining the boundaries thereof, he shall have regard, so far as may be, to the boundaries of wards in scheduled burghs, and of districts, burghs, and parishes in counties.

(2) The Secretary for Scotland shall also by order determine the number of members to be elected to each education authority, and shall apportion them among the electoral divisions of the education area. In making such determination and apportionment the Secretary for Scotland shall have regard to

the population, area, and other circumstances of the scheduled burgh or county, as the case may be, and the electoral divisions thereof.

(3) Before making an order under this section, the Secretary for Scotland shall cause the proposed order to be published in such manner as to make the same known to all persons interested, and shall, after considering any objections and representations respecting the proposed order, and causing a local inquiry to be held if he sees fit to do so, thereafter make the order and cause the same to be forthwith published in the Edinburgh Gazette and in a newspaper circulating in the education area.

3. (1) It shall be the duty of every education authority to prepare and submit to the department for their approval a scheme or schemes for the constitution of committees (in this act called "school management committees") for the management of schools or groups of schools under their control throughout their education area.

Every such scheme shall contain provision—

- (a) For the due representation on each school management committee of the education authority and of the parents of the children attending the schools under the management of such committee; and
- (b) For the appointment thereto, on the nomination of the teachers engaged in the schools under the management of such committee, or, failing such nomination, directly, of at least one such teacher; and also
- (c) In the case of a school management committee having under its management one or more transferred schools, for the appointment thereto of at least one member in whose selection regard shall be had to the religious belief of the parents of the children attending such school or schools.

Further, in the case of a county, every such scheme shall have regard to the desirability of constituting separate school management committees for individual burghs and parishes, and shall provide for the appointment thereto, on the nomination of local bodies (including town and parish councils and at the first constitution outgoing school boards), or, failing such nomination, directly, of persons resident in the locality and otherwise qualified to represent local interests in school management.

(2) A school management committee shall, subject except as hereinafter provided to any regulations and restrictions made by the education authority, have all the powers and duties of that authority in regard to the general management and supervision of the school or group of schools, including attendance thereat: *Provided*, That in the case of a county a school management committee having under its management a secondary school shall have all the said powers and duties not subject to any such regulations or restrictions: *Provided further*, That the education authority shall in every case themselves retain, exercise, and perform all their powers and duties in regard to—

- (a) The raising of money by rate or loan and the general control of expenditure;
- (b) The acquisition or holding of land;
- (c) The appointment, transfer, remuneration, and dismissal of teachers;
- (d) The appointment of bursars and the exercise of the powers conferred by the section of this act relating to power to facilitate attendance at secondary schools and other institutions; and
- (e) The recognition, establishment, or discontinuance of intermediate or secondary schools or of centers of advanced technical instruction.

Powers and Duties of Education Authorities.

4. (1) It shall be lawful for an education authority, with a view to securing that no child or young person resident in their education area who is qualified for attendance at an intermediate or secondary school, and in their opinion formed after consideration of a report from the teachers concerned shows promise of profiting thereby, shall be debarred therefrom by reason of the expense involved, to grant assistance in the case of any such child or young person by payment of traveling expenses, or of fees, or of the cost of residence in a hostel, or of a bursary or maintenance allowance, or any combination of these forms of assistance, or otherwise, as the authority think fit. And it shall also be lawful for an education authority similarly to assist any duly qualified person resident in their education area to enter or attend a university, or a training college, or a central institution (including classes affiliated thereto), or in special cases any other educational institution approved for the purpose by the department.

(2) It shall further be lawful for an education authority to grant assistance by payment of traveling expenses necessarily incurred in the case of any person resident in their education area in attending continuation classes under a scheme for instruction in such classes as in this act provided.

(3) Any assistance granted under this section shall be such as the education authority consider proper and necessary, having regard to the circumstances of each case, including the circumstances of the parents.

5. It shall be lawful for the education authority of a county, as an ancillary means of promoting education, to make such provision of books by purchase or otherwise as they may think desirable, and to make the same available not only to the children and young persons attending schools or continuation classes in the county, but also to the adult population resident therein.

For the purposes of this section an education authority may enter into arrangements with public libraries, and all expenses incurred by an education authority for those purposes shall be chargeable to the county education fund. * * *

6. (1) It shall be the duty of every education authority within 12 months after the appointed day to prepare and submit for the approval of the department—

- (a) A scheme for the adequate provision throughout the education area of the authority of all forms of primary, intermediate, and secondary education in day schools (including adequate provision for teaching Gaelic in Gaelic-speaking areas) without payment of fees, and if the authority think fit for the maintenance or support (in addition and without prejudice to such adequate provision as aforesaid) of a limited number of schools where fees are charged in some or all of the classes;
- (b) A scheme for the exercise by the education authority of their powers under the section of this act relating to power to facilitate attendance at secondary schools and other institutions, together with an estimate of the expenditure involved therein; and
- (c) A scheme of scales of salaries for the teachers employed by the authority satisfying such conditions as to minimum national scales of salaries for teachers as may be laid down by the department after consultation with representatives of the education authorities and of the teaching profession: *Provided*, That such minimum scales of salaries shall be independent of any payment made to teachers out

of any bequest or endowment, the object of which is to secure special emoluments to any class of teachers or to the teachers of any special locality.

(2) Every education authority may at any time, and shall if and when so required by the department, prepare and submit for the approval of the department a revised scheme or modifications of an existing scheme under this section.

(3) Schemes prepared and submitted under this section shall include transferred schools.

7. Whereas it has been the custom in the public schools of Scotland to give instruction in religion to children whose parents did not object to the instruction so given, but with liberty to parents, without forfeiting any of the other advantages of the schools, to elect that their children should not receive such instruction, be it enacted that education authorities shall be at liberty to continue the said custom, subject to the provisions of section 68 (Conscience Clause) of the Education (Scotland) Act, 1872.

8. It shall be lawful for every education authority to make arrangements for—

- (a) Supplying or aiding the supply of nursery schools for children over 2 and under 5 years of age (or such later age as may be approved by the department) whose attendance at such a school is necessary or desirable for their healthy physical and mental development; and
- (b) Attending to the health, nourishment, and physical welfare of children attending nursery schools.

9. (1) It shall be lawful for every education authority to contribute to the maintenance of any school not under their own management which is included in the scheme for the provision of education within the education area of that authority approved by the department, and in which the teachers are remunerated at a rate not lower than the rate for teachers of similar qualifications employed by the authority, as also to the maintenance of any central institution or university, and to make a reasonable representation of the authority on the governing body of any such school or central institution (where such representation is not already provided for) a condition of any contribution other than a contribution required by the following subsection:

(2) Every education authority shall continue to contribute to the maintenance of any school within their education area but not under their own management which at the passing of this act was recognized by the department as an intermediate or secondary school, so long as such school continues to be so recognized, an amount not less than the contribution made to such school in terms of subsection (4) (a) and (b) of section 17 of the Education (Scotland) Act, 1908, in respect of the financial year ending on the 15th day of May, 1914, by any secondary education committee whose powers and duties are by this act transferred to that education authority: *Provided*, That the amount of the contribution required to be made under this subsection shall not exceed the amount by which the income of such school from all other sources falls short of the expenditure.

Any question arising as to the application of this subsection to any school or as to the amount of any contribution so made or to be made shall be determined by the department, whose determination shall be final.

(3) Every education authority shall contribute in each year toward the aggregate expense of maintenance of the training colleges throughout Scotland such sum as the department may determine, being a sum proportioned to the number of fully qualified teachers in the service of each education authority on the 31st day of March in each year.

(4) It shall be lawful for every education authority with the sanction of the department to contribute to the maintenance of any educational institution or agency, where such contribution appears to the department desirable for the educational benefit of persons resident within the education area of the authority.

10. Where an education authority or any other governing body provide and maintain a school, not conducted for profit, which is recognized by the department, and is attended by children whose parents are resident outwith the education area in which the school is situated, there shall be paid in each year to that authority or to that governing body, as the case may be, out of the education fund of each education area in which any such parents are so resident, a sum equal to the cost of the education of such children (including in such cost repayment of and interest on loans for capital expenditure) after deduction, (a) in the case of a school maintained by an education authority, of income from all sources of income other than education rate, and (b) in the case of a school maintained by any other governing body, of income from grants made by the department and from fees: *Provided*, That no payment shall be made under this section out of the education fund of any education area in respect of any child for whom it is shown to the satisfaction of the department that accessible accommodation is available in a suitable school provided within that area, regard being had to all the circumstances, including the religious belief of his parents.

11. (1) An education authority may from time to time, for the purposes of any of their powers and duties under the education acts, acquire, purchase, feu, or take on lease any land.

* * * * *

(3) An education authority may be authorized to purchase land compulsorily by means of an order submitted to and confirmed by the department in accordance with the provisions contained in the first schedule to the Housing, Town Planning, etc., Act, 1909, as applied to Scotland.

* * * * *

13. (1) The expenses of an education authority (including the expenditure incurred by school management committees and local advisory councils in the performance of their duties and approved by the authority) shall be paid out of the education fund of the education area, which shall come in place of the school fund referred to in section 43 of the Education (Scotland) Act, 1872, and of the district education fund referred to in section 17 of the Education (Scotland) Act, 1908.

There shall be carried to the education fund all money received as grants from the department, or raised by way of loan, or transferred to the education authority under this act, or otherwise received by the education authority for the purposes of that fund, and not by this act or otherwise specially appropriated, and any deficiency in that fund, whether for satisfying present or future liabilities, shall be raised by the education authority as hereinafter provided.

(2) Every education authority shall annually ascertain the amount of such deficiency, and, unless and until Parliament otherwise determine in any statute amending the law of rating in Scotland, shall allocate and apportion the same among the parishes comprised in the education area, according to their respective valuations in the valuation roll, and shall, annually on or before a date to be fixed jointly by the department and the local government board for Scotland, certify to the parish council of each such parish the amount so allocated and apportioned thereupon, and the parish council may and shall impose, levy, and collect the same within such parish, under the name of "education rate,"

in the manner prescribed by section 34 of the Poor Law (Scotland) Act, 1845, with respect to the poor rate, and along with but as a separate assessment from that rate, and shall, from time to time as they collect it, pay over the amount collected to the education authority, without any deduction on account of the cost of levying and collecting the same; and the laws applicable for the time being to the imposition, collection, and recovery of the poor rate shall be applicable to the education rate.

* * * * *

(3) In ascertaining the amount of the deficiency in the education fund, and allocating and apportioning the same among the parishes comprised in the education area, the education authority shall take into account and have regard to—

- (a) Any income, revenue, or contribution paid to the authority in pursuance of section 46 of the Education (Scotland) Act, 1872;
- (b) Any money (not included in the preceding paragraph) arising from a trust or endowment, and paid to the authority for behoof of any school in any parish within the education area, or for the promotion of education in any such school, or for or toward the income of any teacher therein;
- (c) The restriction contained in the proviso to the section of this act relating to provision of books for general reading; and
- (d) The direction contained in this act as to any surplus or deficiency shown in the accounts of a school board made up and balanced as at the appointed day.

(4) Any surplus of education rate which may arise in any one year shall be applied for the purposes of the ensuing year, and in like manner any deficiency which may occur in any year shall be included in the rate for the ensuing year.

(5) In the foregoing subsections of this section the expression "parish" includes a portion of a parish, and where a parish is comprised in two or more education areas, the education authority for each such area shall, in allocating and apportioning the amount of the deficiency in the education fund as hereinbefore provided, take into account and have regard to that portion only of such parish which is comprised within their own education area; and no education rate shall be imposed, levied, or collected in any parish or portion of a parish other than the education rate for the education area in which such parish or portion of a parish is comprised.

Extension of School Age—Continuation Classes—Employment of Children and Young Persons.

14. (1) The duty of every parent to provide efficient education for his children shall continue in respect of each child until that child has attained the age of 15 years, and exemption from attendance at school shall not be granted to any child who has not attained the age of 13 years; and the provisions of the education acts which relate to that duty and to such exemption are hereby amended accordingly, that is to say:

In sections 2 and 3 of the Education (Scotland) Act, 1901, and in section 7 of the Education (Scotland) Act, 1908, the word "thirteen" shall be substituted for the word "twelve" and the word "fifteen" for the word "fourteen" respectively wherever those words occur in those sections, and the word "fifteenth" shall be substituted for the word "fourteenth" in subsection (3) of the said section 7.

(2) It shall be the duty of every education authority to exercise the power of prescribing (subject to the approval of the department) dates of commencing

and terminating school attendance conferred by subsection (2) of the said section 7.

(3) Nothing in this section shall—

- (a) Prevent any employer from employing any child who is lawfully employed by him or by any other person before the appointed day; or
- (b) Affect any exemption from attendance at school granted before the appointed day; or
- (c) Affect the provisions of the Education of Blind and Deaf-mute Children (Scotland) Act, 1890, the Education of Defective Children (Scotland) Act, 1906, as read with the Education (Scotland) Act, 1908, or the Mental Deficiency and Lunacy (Scotland) Act, 1913, relating to the attendance at school of the children to whom those acts apply.

15. Sections 9 and 10 of the Education (Scotland) Act, 1908, are hereby repealed and in lieu thereof—

(1) Every education authority shall, after due inquiry and consultation with persons concerned in local crafts and industries and with due regard to local circumstances generally, prepare and submit for the approval of the department a scheme or schemes for the part-time instruction in continuation classes of all young persons within the education area of the authority who may under this act be required to attend such classes.

(2) (a) Every education authority shall prepare and submit for the approval of the department under this section—

- (i) Within one year after the appointed day a scheme applicable to young persons under the age of 16 years; and
- (ii) As soon thereafter as the department may require a scheme or schemes applicable to young persons of any age greater than 16 but not exceeding 18 years.
- (b) When a young person to whom any such scheme applies attains the age of 16 years or any greater age as the case may be during any continuation class session, he shall for the purposes of this section be deemed not to have attained such age until the close of such session, so, however, that a young person shall not by reason of this provision be required to attend continuation classes for more than three months after he has attained such age.

(3) For the better preparation and carrying into effect of schemes under this section, and in particular for the registration and classification of young persons within their areas, it shall be the duty of education authorities to communicate and cooperate with associations or committees of employers and workmen concerned in the registration or supervision of apprentices in trades where apprentices are employed, or with similar associations or committees in trades or businesses where young persons, though not apprenticed thereto, have the prospect of regular employment therein in later years, and to encourage the formation of such associations or committees, and to register and classify young persons within their areas according to their employment in such trades or businesses or in occupations which do not afford the prospect of such regular employment, and to have regard to the educational requirements of such young persons with respect alike to their present and to their prospective employments.

(4) Every such scheme shall provide for—

- (a) Instruction in the English language and literature, and in such other parts of a general education as may be deemed desirable;
- (b) Special instruction conducive to the efficiency of young persons in the employment in which they are engaged or propose to be engaged; and

(c) Instruction in physical exercises adapted to age and physique: *Provided*, That for this purpose account may be taken of instruction in such exercises afforded at holiday camps or in connection with boys' brigades or kindred organizations if the instruction so afforded is approved by the education authority as satisfactory.

(5) The instruction given in continuation classes under any such scheme shall amount for each young person to an aggregate of at least 320 hours of attendance in each year distributed as regards times and seasons as may best suit the circumstances of each locality.

Provided, That no attendance at classes held between the hours of 7 in the evening and 8 in the morning shall be reckoned as part of the necessary aggregate of 320 hours of attendance, except in circumstances and to the extent specially approved by the department.

(6) The obligation to attend continuation classes under any such scheme shall not apply to any young person who—

- (1) Is above the age of 14 years on the appointed day; or
- (II)—(a) Is in full-time attendance at a recognized primary, intermediate, or secondary school; or
- (b) Is shown to the satisfaction of the education authority to be receiving suitable and efficient instruction in some other manner; or
- (III)—(a) Has been in full-time attendance at a recognized intermediate or secondary school until the close of the school session in which he has attained the age of 17 years and is certified by the school authorities to have completed the post-intermediate course; or
- (b) Has attained the age of 17 years and is shown to the satisfaction of the education authority to have completed a course of instruction equivalent in value to the post-intermediate course; or
- (c) Has satisfactorily completed a course of training for, and is engaged in, the sea service, in accordance with the provisions of any national scheme which may hereafter be established, by Order in Council or otherwise, with the object of maintaining an adequate supply of well-trained British seamen, or, pending the establishment of such scheme, in accordance with the provisions of any interim scheme approved by the department.

The obligation to attend continuation classes under any such scheme shall not, within a period of three years from the appointed day on which the provisions of this section come into force, apply to young persons between the ages of 16 and 18, nor after such period to any young person who has attained the age of 16 before the expiration of that period.

(7) Whenever a scheme has been approved by the department the education authority shall, in such manner as the department may by order prescribe, require every young person to whom the obligation to attend continuation classes under such scheme applies to attend with due regularity for instruction in accordance with the scheme at such times and places as the education authority may appoint: *Provided*, That an education authority may, upon such conditions as they think fit, exempt any young person from the obligation to attend continuation classes where, after due inquiry, the authority are satisfied that the circumstances justify such exemption, and the provisions of section 3 of the Education (Scotland) Act, 1901, relating to the keeping of a register and to the power of the department, shall, with the necessary modifications, apply to exemptions granted under this provision.

(8) If it appears to an education authority that any young person of the age of 15 years and upward is neglecting or failing without reasonable excuse to comply with any such requirement of the authority, it shall be lawful for that

authority, after due warning to such young person and to his parent and employer (if any), to summon the young person, with or without his parent or employer, to appear before the authority at any meeting thereof, and to require from him or them every information and explanation respecting such neglect or failure; and if such young person or his parent or employer, or some person on his or their behalf, either does not appear or appears and does not satisfy the authority that there is reasonable excuse for such neglect or failure, it shall be lawful for the authority to order in writing that such young person shall comply with such requirement, or with such other requirement as to attendance as the authority may direct. The authority shall cause a copy of any such order to be served by post on the young person to whom it relates, and if the young person fails to comply with the order he shall be liable, on summary conviction, to a penalty not exceeding 5 shillings.

(9) Every employer of labor shall afford to every young person in his employment any opportunity necessary for attendance at continuation classes in accordance with the requirements of the education authority, including time for traveling, and the hours of employment of any young person when added to the time necessary for such attendance, including time for traveling, shall not in the aggregate exceed in any day or week, as the case may be, the period of employment permitted for such young person by any act of Parliament.

Every employer who fails to afford the opportunity aforesaid, or who employs a young person contrary to the provisions of this subsection, shall be liable, on summary conviction, to a penalty not exceeding 20 shillings, or in case of a second or subsequent offense whether relating to the same or to another young person, not exceeding £5, and every parent of a young person who has conducted to the commission of such an offense by an employer, or to the failure of such young person to observe any requirement of the education authority under this section, shall be liable on summary conviction to the like penalties.

(10) An education authority may, in any scheme under this section, make provision for the attendance at continuation classes of persons of any age who desire to attend such classes although not required by the authority so to do.

(11) An education authority may in any scheme under this section, or by a separate scheme or schemes similarly submitted and approved, provide for the delegation by the authority, subject to any regulations and restrictions made by them, of any of their powers and duties relating to the management and supervision of continuation classes (including attendance thereat) within their education area or any part thereof to any school management committee or combination of such committees within their area, or to a committee or committees appointed by the authority for the purpose, consisting in whole or in part of members of the authority, and any such school management committee or other committee may exercise and shall perform all the powers and duties so delegated to them: *Provided*, That an education authority shall not so delegate any of the powers and duties which, by the section of this act relating to school management committees, the authority are required themselves to retain, exercise, and perform.

(12) Where continuation classes provided by the education authority in any education area are attended by persons resident without that area, there shall be paid in each year to that authority out of the education fund of the education area in which any such persons are so resident a sum equal to the cost of the instruction of such persons in those classes (including in such cost repayment of and interest on loans for capital expenditure) after deduction of income from all sources of income other than education rate: *Provided*, That no payment shall be made under this subsection out of the education fund of any education area in respect of any person for whom it is shown, to the

satisfaction of the department, that suitable instruction is available in accessible continuation classes within that area, regard being had to all the circumstances.

(13) The provisions of section 4 of the Education (Scotland) Act, 1908, which relates to the medical inspection of children, shall apply, with the necessary modifications, to the medical examination and supervision of young persons under the obligation to attend continuation classes under this section.

(14) If a young person over the age of 16 or the parent of a young person under the age of 16 represents in writing to the local education authority that he objects to any part of the instruction given in the continuation classes which the young person is required to attend, on the ground that it is contrary to his religious belief, or likely to give offense to his religious feelings, the obligation under this act to attend those classes for the purpose of such instruction shall not apply to him, and the local education authority shall, if practicable, arrange for him to receive other instruction in lieu thereof or attend other classes.

(15) In this section the expression "young person" includes any person between the ages of 15 and 18 years and also any child under the age of 15 years who has been exempted under the Education (Scotland) Act, 1901, from the obligation to attend school; the expressions "employ" and "employment" include employment in any labor exercised by way of trade or for purposes of gain whether the gain be to the young person or to any other person; and the expression "employer" includes a parent so employing his children.

16. The Employment of Children Act, 1903, so far as it relates to Scotland, shall be amended as follows:

(1) For subsection (1) of section 3 the following subsection shall be substituted—

A child under the age of 13 shall not be employed on any day on which he is required to attend school before the close of school hours on that day nor on any day before 8 o'clock in the morning or after 6 o'clock in the evening, nor shall any child who is of the age of 13 be so employed unless he has been exempted under the Education (Scotland) Act, 1901, from the obligation to attend school: *Provided*, That any local authority may by by-law vary these restrictions, either generally or for any specified occupation.

(2) for subsection (2) of section 3 the following subsection shall be substituted—

No child or young person under the age of 17 shall be employed in street trading.

(3) To section 14 the following definition shall be added—

The expression "child" means a person under the age of 15 years, and for the purposes of this act a child attending school shall be deemed to attain that age on the date prescribed for terminating school attendance next succeeding the fifteenth anniversary of his birth.

(4) References to the Education (Scotland) Act, 1901, shall be construed as references to that act as amended by this act.

17. No child or young person under the age of 15 years who has not been exempted under the Education (Scotland) Act, 1901, from the obligation to attend school shall be employed [as in Fisher Act, sec. 14, p. 100].

Voluntary or Denominational Schools.

18. (1) It shall be lawful at any time after the first election of education authorities under this act for the person or persons vested with the title of

any school which at the passing of this act is a voluntary school within the meaning of the Education (Scotland) Act, 1897, with the consent of the trustees of any trust upon which such school is held, to transfer the school, together with the site thereof and any land or buildings and furniture held and used in connection therewith, by sale, lease, or otherwise, to the education authority, who shall be bound to accept such transfer, upon such terms as to price, rent, or other consideration as may be agreed, or as may be determined, failing agreement, by an arbiter appointed by the department upon the application of either party.

(2) Any grant payable to a transferred school which has accrued in respect of a period before the date of transfer shall be paid by the department to the education authority to whom the school is transferred, and shall be applied by that authority in payment of any liabilities on account of the school then outstanding and, so far as not required for that purpose, toward the maintenance of the school.

(3) Any school so transferred shall be held, maintained, and managed as a public school by the education authority, who shall be entitled to receive grants therefor as a public school, and shall have in respect thereto the sole power of regulating the curriculum and of appointing teachers: *Provided, That—*

(i) The existing staff of teachers shall be taken over by the education authority and shall from the date of transfer be placed upon the same scale of salaries as teachers of corresponding qualifications appointed to corresponding positions in other schools of the same authority.

(ii) All teachers appointed to the staff of any such school by the education authority shall in every case be teachers who satisfy the department as to qualification, and are approved as regards their religious belief and character by representatives of the church or denominational body in whose interest the school has been conducted.

(iii) Subject to the provisions of section 68 (conscience clause) of the Education (Scotland) Act, 1872, the time set apart for religious instruction or observance in any such school shall not be less than that so set apart according to the use and wont of the former management of the school, and the education authority shall appoint as supervisor without remuneration of religious instruction for each such school, a person approved as regards religious belief and character as aforesaid, and it shall be the duty of the supervisor so appointed to report to the education authority as to the efficiency of the religious instruction given in such school. The supervisor shall have the right of entry to the school at all times set apart for religious instruction or observance. The education authority shall give facilities for the holding of religious examinations in every such school.

(4) Any question which may arise as to the due fulfillment or observance of any provision or requirement of the preceding subsection shall be referred to the department, whose decision shall be final.

(5) After the expiry of two years from the passing of this act no grant from the Education (Scotland) Fund shall be made in respect of any school to which this section applies unless the school shall have been transferred to the education authority, and as from the expiry of that period the Education (Scotland) Act, 1897, shall cease to have effect: *Provided, That* the department may extend the said period in any case where, in the opinion of the department, further time is required for the completion of a transfer.

(6) This section shall not apply to any residential institution which is either—

(a) A school for blind, deaf, or defective children, shown to the satisfaction of the department by the person or persons vested with the title of

the school to be attended largely by children whose parents or guardians are resident outwith the education area in which the school is situated; or

- (b) An orphanage shown to the satisfaction of the department by the person or persons vested with the title of the orphanage to be required for the proper education of children destitute of efficient guardianship.

(7) A school established after the passing of this act to which this section would have applied had the school been in existence at that date may, with the consent of the department, be transferred to the education authority, and the provisions of this section shall, with the necessary modifications, apply to any such transfer and to any school so transferred.

(8) In any case where the department are satisfied, upon representations made to them by the education authority of any education area, or by any church or denominational body acting on behalf of the parents of children belonging to such church or body, and after such inquiry as the department deem necessary, that a new school is required for the accommodation of children whose parents are resident within that education area, regard being had to the religious belief of such parents, it shall be lawful for the education authority of that area to provide a new school, to be held, maintained, and managed by them subject to the conditions prescribed in subsection (3) of this section, so far as those conditions are applicable; the time set apart for religious instruction in the new school being not less than that so set apart in schools in the same education area which have been transferred under this section.

(9) If at any time after the expiry of 10 years from the transfer of a school under this section or from the provision of a new school as aforesaid, the education authority by whom the school is maintained are of opinion that the school is no longer required, or that, having regard to the religious belief of the parents of the children attending the school, the conditions prescribed in subsection (3) of this section ought no longer to apply thereto, the authority may so represent to the department, and if the department, after such inquiry as they deem necessary, are of the same opinion and so signify, it shall be lawful for the education authority thereafter to discontinue the school, or, as the case may be, to hold, maintain, and manage the same in all respects as a public school, not subject to those conditions: *Provided*, That in the case of any school which has been transferred to an education authority under this section, that authority shall in either of those events make to the trustees by whom the school was transferred, or to their successors in office or representatives, such compensation (if any) in respect of the school or other property so transferred as may be agreed, or as may be determined, failing agreement, by an arbiter appointed by the department upon the application of either party.

(10) Section 39 of the Education (Scotland) Act, 1872 (which relates to consent to transfers of certain schools under section 38 of that act), shall, with the necessary modifications, apply to transfers under this section as it applies to transfers under the said section 38.

Reformatory and Industrial Schools.

19. After the passing of this act it shall be lawful for the Secretary for Scotland, with the consent of the Treasury, from time to time to make an order transferring to the department any powers relating to reformatory or industrial schools in Scotland for the time being possessed by the Secretary for Scotland under the Children Act, 1908, or any local act (including any powers which have been or may be transferred to the Secretary for Scotland under the said

act of 1906), and by such order to make any adjustment consequential on the transfer and to provide for any matter necessary or proper for giving full effect to the transfer, and on any such order being made the powers so transferred shall be exercisable by the department.

Advisory Council.

20. It shall be lawful for His Majesty in Council by order to establish an advisory council consisting, as to not less than two-thirds of the members, of persons qualified to represent the views of various bodies interested in education, for the purpose of advising the department on educational matters, and the department shall take into consideration any advice or representation submitted to them by the advisory council.

Education Grants.

21. (1) In respect of the year commencing the 1st day of April, 1919, and every subsequent year, in addition to the sums payable out of the Local Taxation (Scotland) Account into the Education (Scotland) Fund under section 15 of the Education (Scotland) Act, 1908, there shall be paid into that fund out of moneys provided by Parliament:

(1) A sum equal to the amount of the sums applicable to education in Scotland (other than the Royal Scottish Museum grant, the capital grant for the training of teachers, sums spent on the superannuation of school-teachers and any sums paid under section 2 or section 50 of the Education (Scotland) Act, 1872), shown by the appropriation account to have been expended from the parliamentary vote for education in Scotland in the year ended the 31st day of March, 1914 (hereinafter in this section referred to as "the standard year"); and

(11) Eleven-eightieths of the excess of the amount of the sums estimated to be expended in each year from the vote for education in England and Wales (except so far as such sums represent expenses of general departmental administration or sums spent on the superannuation of teachers or expenses of services for which in the opinion of the Treasury after consultation with the department Scotland already receives an equivalent by way of direct contribution or of common benefit) over the amount of the sums shown by the appropriation account to have been so expended in the standard year (with the like exception): *Provided*, That if the amount of the sums (with the exception aforesaid) actually expended in any year from the vote for education in England and Wales, as shown by the appropriation account, exceeds or falls short of the corresponding estimate, the sum to be paid into the Education (Scotland) Fund in terms of paragraph (11) of this subsection in the year commencing the 1st day of April next following the day on which such appropriation account is presented to Parliament shall be increased or reduced as the case may be by eleven-eightieths of the difference between such expenditure and estimate.

(2) (a) After providing for the payments mentioned in subsection (1) of section 16 of the Education (Scotland) Act, 1908, the balance of the Education (Scotland) Fund that may remain in any year shall be applied as nearly as may be in making grants in aid of the expenditure of education authorities (or outgoing school boards and secondary education committees) and managers of schools in accordance with minutes of the department laid before Parliament.

Provided that no minute of the department framed under this section shall come into force until it has lain for not less than one month on the table of both Houses of Parliament.

(b) Subsections (2), (3), and (4) of section 16, and sections 17 and 18 of the Education (Scotland) Act, 1908, shall cease to have effect.

Election and Proceedings of Education Authorities.

22. The members for an electoral division of an education area shall be elected by the persons registered as local government electors for that division under the Representation of the People Act, 1918.

23. The voting at any contested election of members of an education authority shall be according to the principle of proportional representation, each elector having one transferable vote as defined by this act.

24. (1) No resolution of an education authority for the dismissal of a certificated teacher from their service shall be valid unless—

(a) Written notice of the motion for his dismissal shall, not less than three weeks before the meeting at which the resolution is adopted, have been sent to the teacher and to each member of the education authority; and

(b) Not less than one-half of the members of the education authority are present at the meeting; and

(c) The resolution is agreed to by two-thirds of the members so present.

(2) Notwithstanding anything in this act, it shall be lawful for any school management committee summarily to suspend any teacher from the exercise of his duties in any school or schools under their management; but such suspension shall not affect the teacher's rights to the salary or other emoluments attached to his office.

* * * * *

25. It shall be the duty of every education authority within three months after the first election thereof to establish an advisory council (in this act called a "local advisory council"), consisting of persons qualified to represent the views of bodies interested in education, for the purpose of advising the authority on matters of educational interest relating to the education area, and the authority shall take into consideration any advice or representation submitted to them by the local advisory council.

26. The department, on the application of an education authority, may within 12 months after the first election of such authority, from time to time make such orders as appear to them necessary for bringing this act into full operation as respects the authority so applying, and such order may modify any enactment in this or any other act, whether general or local, so far as may appear to the department necessary for the said purpose.

General.

27. (1) The department may, after considering any representations made to them on the subject, approve any scheme or revised scheme or modification of an existing scheme submitted to them under this act by an education authority, and thereupon it shall be the duty of the education authority to carry the same into effect as so approved.

(2) If the department are of opinion that a scheme does not make adequate provision in respect of all or any of the purposes to which the scheme relates, and the department are unable to agree with the authority as to what amendments should be made in the scheme, they shall offer to hold a conference with the representatives of the authority, and if requested by the authority shall hold a public inquiry in the matter. The expenses of any such inquiry as certified by the department shall be paid by the authority.

(3) If thereafter the department disapprove a scheme they shall notify the authority and if, within one month thereafter, an agreement is not reached they shall lay before Parliament the report of the public inquiry (if any) together with a report stating their reasons for such disapproval and any action they intend to take in consequence thereof by way of withholding or reducing any grants payable to the authority.

28. A woman shall not be disqualified either by sex or marriage from being a member of any education authority, or committee thereof, or school management committee, or school committee, or advisory council, or any other body constituted, elected, nominated, or appointed for educational purposes under or in pursuance of this act.

* * * * *

30. The Scotch Education Department shall be known as the Scottish Education Department.

33. (1) This act shall extend to Scotland only.

(2) This act shall, except as otherwise expressly provided, come into operation on the appointed day, and the appointed day shall be such day as the department may appoint, and different days may be appointed for different purposes and for different provisions of this act (including the repeal of different enactments), for different areas or parts of areas, and for different persons or classes of persons.

IRELAND.

In spite of the political unrest that has prevailed in Ireland during the past few years, the country has been affected by the educational progress of England, Wales, and Scotland. If the pressure of circumstances has emphasized the demands for increases of salary, that problem is intimately associated with the desire to improve the professional status of teachers and thereby to improve the schools. It is beginning to be recognized that Ireland's greatest need in education is not so much the reform of this or that branch of education as a unification of the different interests into a national system. Few countries can produce a parallel to the tripartite scheme of administration that must inevitably retard educational progress in Ireland. Even though the functions of the Commissioners of National Education, who have charge of elementary education, the Intermediate Education Board, which administers secondary education, and the Department of Agricultural and Technical Education do not as a rule overlap, they necessarily lead to a conception of education by compartments, which is difficult from the administrative standpoint and unjustifiable on public grounds. To these difficulties must be added the sectarian situation, which is another factor that militates against any plans for a successful national scheme. The political element, disturbing as it is for national welfare, has not affected the course of education recently, and it is probable that education is the one question on which all political parties could cooperate, just as all parties and creeds appear to speak with one voice on the inadequacy of the

sums received from the imperial treasury in its relation to Irish education.

The association of some teachers with the Sinn Féin rebellion of 1916 gave rise to a general charge against the character of the teaching in the national schools. As the result of an inquiry, conducted by the Commissioners of National Education, the conclusion was reached that the amount of disaffection among teachers was very slight, and that "even in districts where it might be supposed that disaffection would be apparent, they found many signs in the pupils' exercises that distinctly loyal ideas had been encouraged by the teachers." It might be pointed out, however, as the commissioners did, that national teachers are forbidden to take part in political agitation. The charges that were leveled against the teachers were extended to the textbooks in history; on examination of these books the commissioners ordered that the use of some of them should be discontinued. Textbooks are issued by commercial publishers, and their use is sanctioned by the commissioners.

During the period of the war school attendance has declined somewhat as a result of the exploitation of child labor. In order to encourage pupils to remain at school at least until the completion of the sixth grade instead of drifting away into blind-alley occupations, the national commissioners in June, 1916, inaugurated the experiment of introducing an examination for the higher grade certificates for boys and girls who have passed the sixth grade. The experiment was successful in Belfast and is to be extended to Dublin and Cork. It is hoped that the certificates will come to be recognized by larger employers as the minimum educational qualifications for employment.

The course of the war imposed large economies on educational expenditure, particularly in such matters as buildings, printing, and the collection of statistics. The rapid rise in the cost of living worked particular hardship on teachers of all grades, since salaries in many cases fell below the minimum standard wage of \$6 a week paid to agricultural laborers. In July, 1914, a new scale of salaries, with annual instead of the prevailing triennial increments, was promised to elementary school-teachers, but was not put into force owing to the outbreak of war. From July 1, 1916, a war bonus came into effect for those in receipt of salaries below \$15 a week; the total cost of this increase for the year was \$825,000, giving an average bonus of about 80 cents a week. This did not quell the agitation, which seemed to divert the energies of Irish teachers from their real function. In September, 1917, largely as a result of the example set by Mr. Fisher's additional grant to English education, the sum of \$1,920,000 was granted for Irish elementary education over and above the ordinary estimates, as the equivalent of Ireland's share in the imperial taxation. A large share of this sum is to be devoted to salary increases.

More extensive reforms are needed, however, than the improvement of the teachers' status. Something has been done to develop school gardens, and special courses in horticulture are given to teachers in training to promote this work. Medical inspection of school children has hardly had a beginning, and, although funds are provided since 1914 for the payment of grants for dental clinics, they have as yet shown no development, since local authorities are unable to levy local rates for the purpose. In 1914 power was given to provide meals to necessitous children in the schools, but this measure is also likely to languish, owing to the inertia of local bodies. Attempts to expand the curriculum by the introduction of woodwork for boys and domestic science for girls are blocked not only by lack of funds locally, but by the inability to secure more money from the Treasury. A revision of the school programs is under way, and the need is felt of making them more adaptable to the demands of industrial and rural centers. Conferences have been conducted with teachers, inspectors, principals of secondary and technical schools, and chambers of commerce. Especially urgent is the provision of more opportunities for boys and girls between the ages of 12 and 16. [Other needs that are recognized are the provision of pensions, increased grants for teacher-training colleges, the establishment of higher elementary schools and day and evening continuation schools, the appointment of divisional inspectors, the supply of books and stationery for pupils, and residence grants for teachers.] It is estimated that these reforms would require additional grants rising from about \$4,000,000 to \$5,000,000 a year. But the realization of even these plans of reorganization would only be a very partial installment of the complete revision that Irish education needs to-day to stimulate local effort, to develop local systems of administration, and to articulate all branches of education from the infant schools to the universities. .

Secondary or intermediate education shows in Ireland, as elsewhere in the British Isles, increased attendance; and each year produces a larger number of candidates for the examinations conducted by the Intermediate Education Board. Since 1908 the examination system which was established in 1878, and upon the results of which grants are paid by the board to the schools, has been supplemented by a system of inspection. In 1913 the examination of pupils below the age of 14 was abolished. During the past four years there has been a recrudescence of the criticism periodically leveled against the system. The board states in its report for 1916 that the system has its limitations, and that an examination conducted once a year is not a test. The board has only a fixed sum to devote to the support of intermediate education, and the success of one school means the diminution of the grant to another. Struggling schools can not be assisted, new

ones can not be established without reducing the grants, and facilities can not be extended to encourage elementary school pupils to continue to a higher education. Finally, the board had until recently no power of investigating schools which may still produce successful results in the examinations without being efficient in other desirable respects. The board is inclined to favor two examinations, the one leading to the intermediate certificate at about the age of 16, and the other to the leaving certificate at the age of 19. The grants should not depend primarily on examination results but should be distributed on a capitation basis to schools meeting certain standards of efficiency; for example, in such matters as the maintenance of regular attendance, the qualifications of teachers, and the number of pupils presented for the two examinations mentioned. Only in some such way could adaptation to modern needs be encouraged.

Similar recommendations have been urged by the teachers, who, although actuated primarily by the urgent need for an improvement in their economic and professional status, are also ready to promote the new tendencies. As in the case of elementary education, the reform of secondary education is closely dependent on financial considerations. [Intermediate education is supported by the local taxation duties and certain funds resulting from the disestablishment of the Irish church. These sums are decreasing, while the number of schools and pupils is constantly increasing.] Ireland demands a share in the imperial revenue equivalent to those given to England and Wales and Scotland. It is variously estimated that this share would amount to about \$500,000. In 1917 an equivalent grant of \$250,000 was secured for Irish intermediate education, part of which was for the establishment of courses for teachers, part set aside for aiding buildings and equipment, and the rest to be distributed as a capitation grant among the schools complying with certain conditions. The most important of these conditions is that a school must employ a qualified teacher for the first 40 pupils and an additional teacher for each additional 20 pupils. Such teachers must be paid \$100 a year over the minimum set down in the regulations governing the distribution of the Birrell grant of \$200,000 a year, passed in 1914. These regulations require that lay teachers for purposes of this grant, which was intended for the increase of salaries, must hold a university degree or have had two years of experience, and be paid a minimum salary of \$700 a year, if men, and \$450 a year, if women. Much dissatisfaction has attended the distribution of the Birrell grant, and the increases of salary of qualified lay teachers have been slight; the situation is well indicated by the fact that the highest salary paid to a lay teacher in a Roman Catholic school is \$800 a year, while only a few receive over \$1,000 and still fewer over \$1,500 a year in Protestant schools.

The teachers have, however, an opportunity of developing professional solidarity which should in time lend weight to their recommendations. The Birrell Act of 1914 provided for the establishment of a registration council for intermediate teachers. A council was appointed in 1915 and, although it drafted rules in the same year, nothing further was accomplished until April, 1918, when the intermediate board assumed its functions and issued rules in the following month. Until 1925 it is expected that existing teachers can be registered without much difficulty. Ultimately the qualifications for registration required will be raised to include a university degree or its equivalent, a diploma indicating a year of professional training, and three years of experience. These requirements should stimulate the professional training of secondary school teachers, especially men, as nothing else has done. With a trained teaching profession it seems hardly possible that the present system should continue unaltered.

The view has already gained wide acceptance that future progress of Irish education requires the establishment of a ministry of education with three divisions, for elementary, secondary, and technical education, and an advisory council for each. The needed reforms in secondary education have been summarized in the report made in July, 1917, by its education committee to the senate of Queen's University, Belfast:

That this committee is convinced that the time has come for a thorough reorganization of secondary education in Ireland; (1) in order to improve the tone and character of education by limiting the pressure of examinations, and giving, subject to proper superintendence, greater freedom to the teachers and managers of schools; (2) in order to raise the status and add to the remuneration of secondary-school teachers, so as to attract able and highly trained persons to the profession; (3) in order to obtain a close coordination of primary and secondary systems of education by placing them under one control; that to secure these ends much larger financial provision for education should be made by the State; and that the grant to Ireland should be proportionately equivalent to that which is proposed for England and Scotland.

This report, combined with the statement by the Intermediate Education Board of the limitations of the system that it administers, should be far-reaching in their effects. Such considerations need to be further supplemented by inquiries into the possible sources of aid from local authorities which hitherto have given very little support to secondary education, slight support to elementary education, and comparatively large assistance to technical education. Committees of inquiry, though limited to investigations of the status of teachers, were appointed during 1918. Neither of these can go very far in the consideration of their problems without branching out into the larger and more important problem that is still far from solution—the reconstruction of Irish education in all its phases.

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EDUCATIONAL WORK OF THE CHURCHES IN 1916-1918

[Advance Sheets from the Biennial Survey of Education, 1916-1918]



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EDUCATIONAL WORK OF THE CHURCHES.

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EDUCATION UNDER RELIGIOUS AUSPICES.

By B. WARREN BROWN,

Survey Secretary, Council of Church Boards of Education.

In previous reports to the Bureau of Education it has been impossible to give any comprehensive view of Christian education in the United States because, while the religious forces expended have been very great, there has been no unity or system worthy of the name. Only independent and scattered statements from a few religious organizations have been available. It is not claimed that the material included here summarizes the work of a perfected system of religious education, but there are many evidences of a growing group consciousness among the educational activities of various churches. The Council of Church Boards of Education is a conspicuous example.

The lack of proportion in our present aggregate of church institutions points significantly to the fact that their development was genetic rather than logical. Christian colleges existed before State institutions were founded; indeed, some State universities were originally under denominational control. We have inherited, therefore, a curious alternation of church and State control in higher education. Religious schools were strongly intrenched before any system of common or secondary education had been devised, so that the church system is very highly developed at the top, but depends chiefly on the State for primary and secondary training. Again, various denominations, each acting independently, founded and endowed schools, taking into account mainly their local and denominational situations, but without considering the relation of school to school or of one church organization to another. The result has been an over supply of church institutions in some parts of the country and inadequate facilities elsewhere. Out of these conditions is growing

at the present time a new consciousness of the relationship of one religious body to another in the educational field, of the higher to the lower grades of religious instruction, and of the combined church activities to the public-school system. This awakening is a most encouraging sign of progress. It is not a disparagement of the past. The traditions of Christian education in this country are the object of intense gratitude and pride. This new consciousness is a part of the growing "time-spirit" in which we are seeing things in larger units and closer relationships.

EXTENT OF THE PRESENT SYSTEM.

Out of the total population of 103,000,000 people, there are in the United States 40,515,126 communicants or members of some religious faith. As only 143,000 are members of Jewish bodies, practically all of these are in Christian organizations—some 15,000,000 Catholic and the remainder Protestant. Church population is usually estimated at more than twice the membership, so that this may be regarded as essentially a Christian country, in which the religious forces are powerful.

Institutions.—The educational system controlled by these forces is estimated as follows: 195,276 Sunday schools, with 19,951,675 pupils; about 7,500 parochial schools, with 1,626,123 pupils (90 per cent Catholic); 1,586 high schools or academies, with 103,829 students (55 per cent Catholic); 41 junior colleges, 395 four-year colleges and universities, with a total attendance in 1916-17 of approximately 120,000 students; and 164 schools of theology. In addition to these definite grades of instruction there are many miscellaneous institutions conducted in part by boards of education and in part by mission boards. The activities of 10 denominations alone out of the Protestant group include 13 training schools; 11 seminaries (ungraded), for women; 107 orphanages, with grade-school instruction; 228 schools for Negroes; 3 for Indians; and a score of other miscellaneous institutions. To these should be added, also, the "mountain white" schools conducted by the churches and the night schools for immigrants under the Young Men's Christian Association.

However, church interests in education are by no means as coherently related as might be inferred from the above statements. There is comparatively little connection between the higher and lower branches of this system. Up to the present time the Sunday school has had only a slight relation to the church preparatory school, college, or seminary. The Lutherans, for example, have many week-day religious or parochial schools for children, but relatively small interests in the field of higher education. Many Protestant denominations have large holdings in the field of higher education, but prac-

tically no week-day schools of secondary and primary grade. It is apparent, therefore, that our religious education is dependent on the public-school system for any connected or logical sequence of instruction.

Cooperation with public schools.—As church institutions by no means cover the educational field, there has been a growing disposition to provide religious instruction for the youth of the church who attend State institutions. It is an acknowledged fact that more students of leading denominations go to the State universities than to their own church colleges. It has been further demonstrated this year that between 70 and 75 per cent of the students now in State universities are members of some church. Obviously, the churches having shut out religious instruction from these institutions by law are under obligation to supply this teaching independently. The situation is being provided for along three definite lines:

(1) Paid secretaries are maintaining the Christian associations in State institutions. The membership thus secured averages about 40 per cent of the student body.

(2) Religious workers are placed in State institutions by the different denominations. In this way \$57,000 was spent last year by four denominations.

(3) Bible chairs or schools of religion are maintained. By means of these credit is allowed for religious instruction properly supervised and nonsectarian.

The Catholics maintain chapels, the Episcopalians church clubs, the Disciples and Methodists Bible chairs, and the Presbyterians religious workers.

Movements are under way, also, to cooperate with the public-school system in the field of secondary education. The development of a graded system with teacher training in the Sabbath schools and particularly the framing by agreement among the denominations of satisfactory courses in the materials of religion have made possible the crediting of this work in the high-school curriculum. This plan in various forms has been tried with considerable success, especially in North Dakota, Colorado, and the State of New York.

A further attempt to correlate church and State education is the promotion of week-day religious instruction. The most interesting efforts of this sort to make church instruction somewhat more systematic than is possible in the Sabbath schools, adjusting the hours and program to the schedule of the public schools, are found in Malden, Mass., and Gary, Ind. A movement similar in effect is the daily vacation Bible school project, which has developed extensively during the past two years. The usual course is a daily session covering five weeks. During 1917 there were 600 schools in 97 centers, with an attendance of 64,000 pupils, in addition to separate schools

conducted by the Presbyterian denomination alone. This organization has been somewhat stronger in 1918 and in some localities the Presbyterian and international associations have joined forces.

Coordinating agencies.—For the most part, church interests in education have grown spontaneously rather than through outside control and supervision. During the past few years, however, there has been a steady trend toward centralization. Twenty of the leading denominations now have definite boards of education and others are considering closer organization. Many of these boards are highly systematized and exert a powerful influence for education in their constituency. Their combined budgets for 1918 amounted to \$1,500,000.

Recognizing the fundamental unity of their interests, these boards in 1911 united in a Council of Church Boards of Education. In 1914 the council organized the Association of American Colleges, which now numbers 230 standard institutions. Several denominations also have separate associations of their own colleges. The Council of Church Boards of Education, working in conjunction with the Association of American Colleges, the Christian Associations, the organization of Church Workers in State Institutions, the Religious Education Association, the International Sunday School Association, and the Commission on Christian Education of the Federal Council of Churches, is now in a position to coordinate more fully the large educational interests of Protestant bodies. It is, of course, recognized that the Catholic interests have long since been highly organized.

HIGHER EDUCATION.

Professional training.—Although some universities under denominational control have many professional departments, the church makes no claim to the field of technical professional education other than for the ministry and missions. In this field it has a virtual monopoly. Replacing the present ministry and providing for reasonable growth calls for the addition of at least 4,500 ministers each year. To train this number of recruits there were, in 1915, 164 theological schools. The Protestant schools offer, as a rule, three-year courses, and the Catholic schools six-year courses. Some 86 Protestant seminaries maintain a reasonable standard of professional education, the remaining Protestant schools offering work of somewhat lower grade for foreign-speaking candidates. Sixty-seven seminaries of eight leading denominations have total assets, including plant and endowment, of \$31,295,000, or about one-half of the total assets of all the seminaries in the field. Correspondence schools and summer institutes, especially in the South, provide a partial substitute for seminary training. There has also been a

marked increase in the loan funds at the disposal of seminaries and boards of education to assist needy students. However, the number of students graduated by all theological schools approximates only 2,500 per year, or about one-half the annual demand. The remainder must be supplied from students who fail to complete the seminary course or enter the ministry directly from college. The problem of securing professional religious workers is consequently a problem of increasing attendance at the seminaries. The war greatly complicated the situation by cutting down seminary attendance 12 per cent during the past year, and in particular reduced the number in the entering classes. Losses during the coming year will be even heavier. With all due allowance for consolidation of churches and a larger average congregation per minister, the reduction of the number of trained leaders at a time when the supply is only 50 per cent adequate constitutes a serious menace to the future strength of the ministry.

The question of the proper content of theological instruction was greatly complicated by the war. During the past few years there was a uniform demand among all churches for a highly trained ministry and the standards of ordination in the various communions was steadily raised. There is no disposition at present to lower standards, but the desire is widespread to make theological training respond more directly to the essential needs of the time. Two important conferences on this subject were held during the year, the former including representatives of all Baptist seminaries and the latter a more general conference called in August, 1918, by Harvard University.

Liberal arts colleges.—At the present time the field of liberal arts is evenly divided between church and private institutions on the one hand and State institutions on the other. The former have a larger attendance and a greater number of schools, while the latter are growing more rapidly. At present there are affiliated with the various church boards of education 333 colleges and universities, 41 recognized junior colleges, and 28 other colleges for Negroes. The total assets of these schools, together with Catholic institutions, are in excess of half a billion dollars and their combined income more than \$25,000,000 per year. During the past four years their gifts for plant and endowment averaged almost \$30,000,000 per year. By far the largest educational interests are controlled by the Presbyterian Church in the United States of America with 64 colleges, the Methodist Episcopal Church with 44 colleges, the Baptists with 22 in the North and 38 in the South, and the Congregational Churches with 41 colleges and universities, including those historically related to the denomination. The total attendance of these, together with 62 Catholic colleges, was 120,000 students in 1915,

as compared with 83,000 liberal arts students in 93 State institutions for the corresponding year. The effect of the war, however, was to reduce college attendance on the average 18 to 20 per cent below the total for 1916-17. This reduction affected State and private institutions equally. The loss in the beginning classes, however, was somewhat heavier in church than in State institutions. Thus far it has not been necessary to close the doors of any church colleges on account of the war, although some 10 or 12 preparatory schools have been discontinued. By the utmost economy, coupled with unusual exertions in the raising of emergency funds, colleges have been able to live practically within their incomes and to close the year 1917-18 with relatively small deficits. This, however, is an achievement which could hardly be duplicated after another year of the war.

RECENT PROGRESS.

Standardization.—The tendency in recent years to define sharply the different grades of education and to standardize institutions has been shared by the various church authorities. At the present time the three main branches of the Presbyterian Church, the two Methodist bodies, the United Brethren, and some of the smaller denominations have definite requirements for grading their schools. In particular, the Methodist Church, South, has greatly cleared the situation in its territory by sharply defining and classifying junior colleges. The Association of American Colleges has taken the lead in formulating the specifications of an efficient college and is now defining college efficiency on the financial side. The Religious Education Association, with the cooperation of the Council of Church Boards of Education, classified the Bible department in all of the higher institutions with a view to improving the standard, and the council has further promoted conferences for standardizing the Biblical instruction within those departments.

Financial campaigns.—It became evident some years ago that to realize the standards defined, larger endowments and incomes were indispensable. The past three years have therefore seen a remarkable group of campaigns among different denominations to promote their educational resources. The denominations of these boards affiliated with the council have been in the field for an aggregate of \$100,000,000. Of this amount the Disciples and Baptists, North, have now raised nineteen and a half million dollars. The most notable campaign has been handled by the Methodist Episcopal Church, completing on July 4, 1918, a jubilee fund of \$27,000,000.

Even greater efforts are now projected for the immediate future. The Southern Baptist denomination has blocked out a campaign for \$15,000,000 during the next five years; the Southern Methodist Church is committed to an educational campaign for \$13,000,000 for

colleges and \$10,000,000 additional for its two universities. The Presbyterian Church in the United States of America is projecting plans for campaigns totaling almost \$75,000,000, in which education will have a large share. A similar movement is under way in the Presbyterian Church in the United States (Southern). It is, therefore, evident that church standards of education, so far as they can be attained through financial strength, are in a fair way to be realized, and we are passing out of the period in which a denominational school because it is small is to be reproached with inadequate facilities for a well-rounded education.

War service.—During the past year the colleges with all they possessed were absolutely at the disposal of the Government. Students were encouraged and even urged to enlist. Some 45,000 college students left school almost immediately and more than 1,000 faculty men, including a score of college president, entered war service of some sort. College incomes were reduced more than \$2,000,000 through the loss in tuition and institutional costs increased an equal amount through rise in prices. In so far as they could secure military instructors, the Christian colleges introduced military training. The larger institutions were active in scientific research connected with the war, and all rendered valuable service in campaigns for the Red Cross, Young Men's Christian Association, liberty loans, recruiting, and to an even greater extent in interpreting the spiritual meaning of the struggle. On the other hand, all educational leaders recognized fully that the channels of trained leadership for the future should not be completely blocked and efforts were redoubled to maintain the essential lines of education.

Cooperation.—The most significant tendency of the year, greatly stimulated by the war, was the increasing cooperation of all the interests in the field of religious education. Within particular denominations there was a definite tightening of the bonds uniting educational institutions. During the year the Episcopal board strengthened its college department; the Presbyterian Church in the United States of America consolidated its various educational interests under a single board; the Methodist Church, South, expanded the work of its board of education and organized its colleges in an association; and the Reformed Church in America projected a survey of its educational interests.

The extent of interdenominational cooperation may be estimated from the activities in which the various churches have joined forces. At the present time colleges of most of the Protestant denominations, together with many Catholic schools, are combining much of their advertising under the leadership of the Council of Church Boards of Education, various State associations of colleges, and State Councils of Defense, and the National Council on Education,

which conducted an emergency campaign from Washington during the summer of 1918. The various church boards of education have combined their educational survey work and investigation in a single department. A new publication, the American College Bulletin, now serves as a medium of contact between interests in this field. A considerable venture in cooperative purchasing has also been developed by the Association of American Colleges. The same organization has secured scholarships for some 220 French girls distributed among American colleges. The American College Bureau, a cooperative agency for securing teachers, is in operation. In short, all the agencies of this field are working together in a way never before deemed possible.

These and other cooperative activities have been furthered by a number of important educational conferences during the year. The Council of Church Boards of Education, the Christian Associations, and the Church Workers in State Universities held a joint meeting at the beginning of the year to consider religious work in State institutions and united in the organization of a Nation-wide campaign to accomplish the Northfield program for Bible study. There have been special gatherings of those interested in college Bible departments, standards of Sunday school work, cooperative purchasing, preparation for the ministry, and the relation of the colleges to the war. Indeed, it is safe to say that there has been more impetus toward close educational cooperation among different religious bodies during the past two years than in the entire previous generation.

THE FUNCTION OF CHURCH EDUCATION.

The drawing together of the educational programs of religious bodies formerly independent naturally raises the question of the extent to which they hold a similar conception of their educational responsibilities. The educational activities of the churches seem to agree fundamentally on the following principles:

1. Religious instruction is necessary to a complete education. As such teaching is legally excluded from public schools, Christian institutions of learning and facilities for religious training at State institutions are necessary to supplement the public system.

2. The education necessary to the achievement of the Christian program must provide (a) trained church leaders; (b) denominational centers of influence; (c) educational facilities where the public schools do not reach; and (d) conservative influence on secular education.

It is not probable that any religious denomination would take exception to the general substance of these principles. Indeed, there is a very strong tendency on the part of the leaders in secular edu-

cation to indorse them without qualification. It is generally recognized that church schools have contributed to our total system of education a moral tone which would have been impossible under purely secular control. There is less disposition than ever before to bring about a mere duplication of educational facilities as between church and State and, on the other hand, a far stronger tendency to secure from each type its highest contribution to the Nation. Undoubtedly, means must be found by which greater continuity of religious and moral instruction from the lower to the higher stages of the educational system may be secured. However, the cordial relations among church bodies and between church and public education provide a much easier approach to that problem than has been possible for many years.

CHRISTIAN DAY SCHOOLS OF THE LUTHERAN CHURCH.

By W. C. KOHN,

President, Concordia Teachers College, River Forest, Ill.

The Christian day school constitutes the foundation of the Lutheran educational system in the United States. The basis of this system is the principle that religion is the most important object of human interest and concern. The children of today are the men of the church and the state in the future. The future of the church and of the state will depend upon the training and the education of the children in the present.

The Christian day school is a voluntary enterprise of a Lutheran congregation whose members, constrained by nothing but their own personal convictions based on scriptural truth, vote to establish and maintain a school in their parish. With the adoption of such resolution they mutually agree to send their children to that school. They select and call the teachers, build and equip the schoolhouses, and assess themselves for the support of the teachers and the maintenance of the schools.

The congregation is the owner of the schools, and has full control over them. This is a very important point. It asserts for the congregation the right of supervision. The pastor is the supervisor of the school, of both teacher and pupils. His supervision extends over religious instruction and over secular branches in so far as they are means of training. As branches of learning and knowledge, secular studies are under the supervision of the congregation, and this supervision is generally exercised by a school board.

In a few instances a so-called "school society" is organized by the members of the congregation, who alone contribute to the erection and maintenance of the school, leaving the institution, however, under full control of the congregation.

Since the Lutheran doctrine concerning the means of grace, that the Word of God is the incorruptible seed through which the soul is born again, and the firm conviction that education does not mean only the acquiring of knowledge of fundamental subjects, but is mainly the building up of an honest Christian character, which can not be done except under the continual influence of the scriptural Christ ideal, this makes it imperative for the members of the congregation to insist upon an early and thorough instruction of the young.

The parents are expected to send their children to the Christian day school in preference to any other, although such attendance is not made compulsory, moral and religious persuasion being the only methods employed in dealing with indifferent parents.

The basis on which the Christian day school is organized is the same as that of the public school in all its details, except that it devotes the first hour of each day to religious instruction and that all secular branches are taught in the spirit of the Holy Writ. The material used in the religious instruction is: Bible reading, Bible stories, Luther's small catechism with proof texts and explanations, Church prayers, and the most important Lutheran hymns. The textbooks on secular subjects are either those used by the public school or such as are published by the educators of the church, written in harmony with the doctrinal truths of the church. The medium of instruction is mostly English. The religious instruction is graded similar to that of secular topics. In the first three grades the children are taught simple Bible stories, the text of the chief parts of Luther's small catechism, and several morning and evening prayers. In the fourth and fifth grades an additional number of Bible stories with application to experiences in the child's life, a supplement of proof texts, and Lutheran hymns are taught. The sixth, seventh, and eighth grades comprise a thorough repetition of the entire catechism, Bible stories with a brief survey of the first three centuries of church history, and an intense study of the Reformation.

The greatest number of the Christian day schools in the larger cities are accredited by the educational authorities.

The spirit prevailing in the schools of the synodical conference is patriotic in the true sense of the word. The education of the teachers vouchsafes a spirit true to its government.

THE TEACHER OF THE CHRISTIAN DAY SCHOOL.

It has been customary in the synodical conference and other Lutheran bodies since the past 70 years to draw the teachers from their own rank and file. The teachers of the Christian day schools, as well as the pastor, who is ex-officio superintendent of the school in

his parish, are continually on the lookout for bright boys in their schools. Having found a strong, healthy, and studious lad they try to convince him and his parents of the necessity of good educators. On the decision of both the parents and the boy he is sent to one of the normal schools of the church. The synodical conference has three such schools, one at Seward, Nebr., for the West, another at River Forest, Ill., which is large, modern, and exceedingly well equipped, and the third at New Ulm, Minn. At these institutions tuition is entirely free; all expenses for salaries, equipment, and repairs are defrayed by the synod body. Ways and means are found to support even indigent students.

The institution at Seward has an enrollment of 135, and Concordia Teachers' College, at River Forest, 225 students; New Ulm has 98.

These colleges offer a high-school course of four years, and a normal divinity course of two years. Entrance requirements for the normal courses are 20 credits of high-school work. The courses are as follows: Isagogics, sacred history, church history, expositions in dogmatics, pedagogy, psychology, teacher's course in music, English, German, practical teaching in training school, mathematics, general science, general biology, nature study (including field work), chemistry, geography, physiography, physiology, and music (harmony, organ, and piano). The object of such education is not only to offer the student an opportunity to obtain a general education but also to train him in the practical, technical, and vocational work which the profession of a religious teacher requires. For the achievement of this aim a training school is connected with the colleges, where the members of the senior class are given ample opportunity to observe and to practice the art of teaching religion and the secular branches under the immediate supervision of two competent critic teachers. This training offers the students special advantages, because there they are confronted with actual school conditions, and are led and directed to meet these conditions according to the most approved methods, thus making a practical study of school conditions, school administration, school methods, and school children. At the same time they continue with their regular studies. This correlation between practice teaching and class-room study of great subjects strengthens and broadens each part of a professional course and helps the normal teacher to keep his classwork in close touch with the everyday work of the schools and adapt it more fully to the practical needs of the student.

Before the student enters the last year he is given an opportunity to serve as supply or substitute teacher in different schools. He is required to do consecutive work in some specific grade of a large school, or practice work in all grades in a country school. If his work as substitute is efficient he enters the class of candidates, and

if his work continues to be satisfactory he is recommended as a permanent teacher at the end of the school year.

The institution at River Forest, Ill., has a fine museum, with an abundance of museum material, located centrally in order to be in close connection with the classrooms. The material is not used for the sake of satisfying the visitors' curiosity, but for educative purposes.

In order to acquaint the students with the best talent in art, weekly lectures and recitals (song, organ, and piano) are given them by well-known artists. This tends to spur the students onward, and gives them a wider range and an idea of the achievements which can be reached.

For the teaching of science a complete chemical laboratory is equipped, ready for use at all times.

For the instruction in music and for practicing, 8 pipe organs and 20 pianos are at the disposal of the students at regular periods.

COURSES OF STUDY.

The college offers a high-school course of four years and a normal divinity course of two years. Entrance requirements for the normal course are 20 credits of high-school work.

In the high-school department the following courses are given:

English:	Units.
General literature.....	1
American literature.....	1
English literature.....	1
Composition and rhetoric.....	1
German:	
3: Modern prose and poetry. Elementary composition and grammar..	1
4: Advanced prose and poetry. Advanced grammar.....	1
5: Study of German classics. Essay course.....	1
6: Outline of German literature, from earliest times to Heine, Theory of composition	1
7: Study of Schiller, Goethe, Herder, Lessing, etc., The modern essay..	1
Mathematics:	
Advanced arithmetic.....	1
Algebra (to quadratics).....	1
Algebra (through quadratics).....	1
Plane geometry.....	1
History:	
Ancient.....	1
Medieval and modern.....	1
United States (advanced course).....	1
Biblical.....	1
General science.....	1
General biology.....	1

	Units.
Nature study -----	1
Chemistry -----	$\frac{1}{2}$
Geography -----	1
Physiography -----	1
Elementary dogmatics -----	1
Music (harmony, organ, and piano) -----	$1\frac{1}{2}$

One unit credit is the equivalent of 150 class periods of 60 minutes.

The Normal Divinity Department offers the following courses:

Pedagogy:

History of education.
Principles of education.
Psychology.
Methods.

Teachers' courses:

Reading.
Grammar.
German.
Arithmetic.
History.
Penmanship.
Drawing.
Catechetics.

Courses in literature and rhetoric:

American.
English.
German.

Isagogics.

Sacred history.

Church history.

Expositions in dogmatics.

Teachers' course in music.

Practice teaching in the training school.

IMPROVEMENT OF TEACHERS.

Since the last four years agencies for the improvement of teachers both during the period of preparation and while in office have been increasing in efficiency and in number. One of the most potent is the "Teachers Conference." The synods have divided their territories into districts, and the teachers within each district form a conference, the attendance of this conference being obligatory. These conferences convene from two to four times annually. In their meetings they follow the plan of intensely discussing one or two topics, assigning one speaker to present an outline of the problem or topic. When this paper has been read, the discussion is opened to those voicing different opinions. It is evident that this will concentrate the attention of all to the topic under discussion and enable every one to render an intelligent decision when at the close of the discussion the proposal for adoption or rejection of the essayist's views is passed upon by vote. Each year these district conferences send one or more representatives to a general conference which convenes annually in one of the larger cities, and in which topics concerning the national welfare of the Christian day schools are ventilated. The Missouri Synod has appointed a committee or an editorial staff which publishes a pedagogical magazine, "Schulblatt," monthly in the interest of the school and the teacher.

Lutheran normal colleges reported at the beginning of the year 1918 are as follows:

Wartburg Teachers' Seminary, Waverly, Iowa (Iowa Synod), 11 teachers, 158 students.

Lutheran Normal School, Madison, Minn. (United Norwegian Church), 9 teachers, 157 students.

Lutheran Normal School, Sioux Falls, S. Dak. (Norwegian Synod), 11 teachers, 210 students.

Immanuel Lutheran Normal, Greensboro, N. C. (colored; Synod Conf.), 4 teachers, 50 students.

Concordia Teachers' College, River Forest, Ill. (Missouri Synod), 13 teachers, 231 students.

Lutheran Teachers' Seminary, Seward, Nebr. (Missouri Synod), 9 teachers, 152 students.

Evangelical Lutheran Normal School, Woodville, Ohio (Ohio Synod), 5 teachers, 62 students.

At various other colleges, seminaries, and academies of the Lutheran Church bodies normal courses are given for the preparation of teachers for the Christian day schools.

THE OFFICE OF THE CHRISTIAN DAY SCHOOL-TEACHER.

The teacher of the Lutheran day school is called as an assistant to the pastor, and before he enters upon his duties he is installed in the capacity of a "regular" minister of religion, whereupon he takes the oath of office that he will well and truly conform to the principles of religion as quoted in the official Hand Book, Confessions, and Holy Writ as taught by said synod. And as such it is his regular and customary vocation to teach the principles of religion to the children of the congregation which called him. His duties further consist in teaching and preaching in regular catechetical and Sunday services and in conducting the reading service in the absence of the duly ordained pastor. Thus the teacher not only makes the teaching of the principles of religion his life vocation, but he is primarily engaged in teaching such principles to the children of the congregation. Where the congregation is too small to engage an assistant pastor to look after the spiritual welfare of the children and young people this duty devolves upon the duly ordained minister. For this reason—that he is principally engaged in religious work assisting the pastor in taking care of the spiritual welfare of the children—he is looked upon by the synod, as well as by the individual congregation, as a regular minister of religion.

SCHOOL BUILDINGS.

Within the past 15 years the Lutheran Church bodies have made remarkable improvements in school buildings of cities and large

towns, as well as in buildings for country schools. Many of them are approaching the ideal schoolhouse. Every site selected must be a location comparatively level and situated so that it can be kept dry, with enough space for a good playground.

SUPERVISION.

Besides the supervision exercised by the congregation and its pastor, the Lutheran Church has elected a general board to improve upon its entire school system, and each district has elected a supervisory board for the supervision of the schools in its territory. The district board is in close connection with the general board, and must make semiannual reports. In some localities the following system prevails: Each synodical district, comprising one or two States, has elected boards whose duties are to inspect schools, to hear appeals concerning school matters, to see that the curriculum and the lesson schedule adopted by the church are carried out so that the aim set for the school is achieved, to make a summary of the statistics, to oversee the educational work in their locality, involving about 15 schools, and to make the necessary reports to the district boards.

The second administrative unit is the district board. This board receives the reports of the local boards, and improves upon a uniform curriculum and schedule by comparing the reports from the various localities. In some instances, such as in the northern Illinois district of the Missouri Synod, a superintendent of schools is elected, who is chosen by popular vote at the district convention. It is his duty to visit the schools, examine the teachers, call institutes, hear appeals in school matters, and superintend the educational interests of the districts. In all districts there is a board which cooperates with the superintendent.

STATISTICS.

According to the reports offered by the representatives of the different synods of the Lutheran Church the status of the Lutheran parochial school is as follows:

The German Iowa Synod reports 416 schools, 52 teachers, 400 pastors teaching in school, 14,130 pupils, 38,847 members, and 128,219 communicant members.

The Lutheran Free Church reports 210 schools, 255 teachers, and 6,500 pupils.

The Joint Synod of Ohio and other States reports 281 schools, 109 teachers, 9,391 pupils, 200 pastors teaching in school, 206,198 members, and 139,015 communicant members.

The United Synod in the South has no Christian day school. It has a membership of 73,510 and a communicant membership of 53,226.

From the General Synod no Christian day school has been reported. Its baptized membership is 474,740, and its communicant membership is 364,072.

The General Council is composed of 13 synods, with 610 schools, 747 teachers, and 24,605 pupils. Its baptized membership is 700,441, and its communicant membership 531,978.

The Ellison's Synod reports 6 Christian day schools, 6 pastors teaching in school, 300 pupils, baptized membership 1,567, communicant membership 1,232.

The Danish Lutheran Church reports 84 schools, 84 teachers, 2,230 pupils, 21,401 baptized members, and 14,463 communicant members.

The German Immanuel Synod has reported no change from the last issue, in which she stands with 15 schools, 15 teachers, and 323 pupils.

From the Icelandic Synod and the United Danish Lutheran Church no parochial school work has been reported.

The Finnish Suomi Synod reports 61 schools, 65 teachers, 3,998 pupils, 32,541 baptized members, and 16,511 communicant members.

The Norwegian Lutheran Church of America reports 853 schools, 1,283 teachers, 50,371 pupils, 485,000 baptized members, and 300,000 communicant members.

The Synod of Missouri, Ohio, and other States reports 2,213 schools, 1,173 pastors teaching in school, 1,450 teachers, 96,737 pupils, 1,000,914 baptized members, and 613,798 communicant members.

The Wisconsin Synod reports 250 schools, 173 teachers, 16,412 pupils, baptized membership 190,946, communicant membership 155,261.

The Minnesota Synod has 120 schools, 41 teachers, 11,593 pupils, 37,537 baptized members, 26,319 communicant members.

The Michigan Synod has 76 schools, 27 teachers, 6,837 pupils, 23,124 baptized members, and 12,121 communicant members.

The District of Nebraska has 25 schools, 11 teachers, 1,210 pupils, 7,815 baptized members, and 5,909 communicant members.

The Slovak Synod reports 30 schools, 6 teachers, 1,614 pupils, 12,970 baptized members, 8,570 communicant members.

EDUCATION IN THE METHODIST EPISCOPAL CHURCH.

By HENRY H. MEYER,

Editor of Sunday School Publications.

The Methodist Episcopal Church emphasizes the importance of educational work. It holds that the individual to be a useful member of society must have high ideals of life and conduct and must possess the ability to act in accordance with those ideals both for the sustenance of his own life and for the service of mankind.

PARISH INSTRUCTION.

At the foundation of the whole plan is the educational work in the local parish. The general conference of the church has made provision for the maintenance of a board of Sunday schools whose duties are "to found Sunday schools in needy neighborhoods; to contribute to the support of Sunday schools requiring assistance; to educate the church in all phases of Sunday-school work, constantly endeavoring to raise ideals and improve methods; to determine the Sunday-school curriculum, including the courses for teacher training and, in general, to give impulse and direction to the study of the

Bible in the church." For the year 1917 the board reported 36,302 Sunday schools with a staff of officers and teachers of 414,480 and a total enrollment of 4,679,943. In each case the figures were the highest in the history of the church.

The textbooks and periodicals furnished by the Methodist Book Concern show improvement both in variety and quality. A complete carefully graded course of study is now provided for pupils of all ages, a three-year course of training for prospective teachers and officers is available, and there is an increased supply of literature dealing with special aspects of religious education. These publications have a circulation of 5,000,000, of which 343,000 are for teachers. Special attention has been given to the interpretation to the pupils of present world conditions. Twelve lesson courses of study have been prepared and widely distributed on the topics of "World Democracy" and "Marshaling the Forces of Patriotism."

An important educational work is carried on by the Epworth League through its study classes and institutes and especially by means of its plan whereby every league member is assigned to some definite task in the service of the church and the community.

SCHOOLS AND COLLEGES.

The Board of Education of the Methodist Episcopal Church holds an advisory relation to all the Methodist Episcopal schools and colleges, which are, as far as possible, independent and self-supporting.

Institutions.	Num-ber.	Grounds, buildings, and equipment.	Endowment.	Annual income.	Debt.	Faculty.	Students.
Colleges, universities, theological seminaries, etc.....	49	\$27,968,503	\$29,203,499	\$4,893,997	\$1,521,262	2,506	38,661
Secondary schools.....	39	4,268,311	1,759,233	641,893	372,001	431	7,343
Negro institutions.....	20	2,075,450	745,442	404,906	15,000	333	6,006
Total.....	108	34,312,264	31,709,170	5,940,596	1,898,263	3,270	52,010

Much of the endowment of the schools and colleges is secured through the cooperation of the board of education. In some cases direct gifts of money are contributed to the annual income, out of a fund which the board maintains for that purpose. During the year 1917 a total of \$43,030.43 was granted to schools.

Through the university senate the church exercises its power to maintain standards of endowment, equipment, and scholastic work in the colleges and schools. The senate consists of 16 college presidents. Created in 1888, it is believed to be the first organization for standardizing colleges in America.

In order that a Methodist Episcopal institution may be listed as a college it must satisfy five principal requirements:

1. A four-year preparatory course for entrance to the freshman class.
2. Four years of college work leading to the bachelor's degree.
3. A faculty of not less than six teachers giving time exclusively to college, as distinguished from preparatory or professional school work.
4. Not less than 50 students regularly enrolled in the four college classes.
5. A minimum of \$200,000 of productive endowment over and above annuities and debts.

SECONDARY SCHOOLS.

During the biennium 1915-1917, 39 secondary schools were affiliated with the board. Institutions of this class do not progress rapidly, since the advance and expansion of public high schools supplies so well the increasing demand for secondary education. There is nevertheless a constant need which the public high school can not fill. Children whose parents are dead, or divorced, or constantly traveling, or who are made sensitive by slight mental and physical defects must receive personal care in their education. Therefore the board includes in its responsibilities the support and encouragement of secondary schools.

The total faculties include 431 members. Total attendance for the school year ending in June, 1917, was 7,343.

Fifteen schools at widely separated points in the southern mountains are a direct charge and not merely under the board's supervision. Extension of education among the highlanders of the South is a field of activity assigned by the general conference of 1908. These southerners were never slaveholders. Turning to the mountains from a love of hunting and adventure, or driven there to avoid the fate of the poor whites, they fell into poverty and isolation, from which but few have ever emerged.

The board of education furnishes in this section both institutions and the means of attending them.

Funds for the support of schools are taken from the public educational collection, of which one-fifth is paid to the board, while the remainder goes directly to the local Methodist institution.

PROGRESS IN TWO YEARS.

Comparing the same 49 colleges, universities, and professional schools, in the reports for June, 1915, and June, 1917, they progressed in every direction:

	Grounds, buildings, and equipment.	Endowment.	Income.	Debt.	Faculty.	Students.
June, 1915.....	\$25, 563, 330	\$28, 075, 359	\$4, 280, 632	\$2, 837, 356	2, 411	33, 528
June, 1917.....	27, 968, 508	29, 203, 490	4, 893, 997	1, 521, 262	2, 506	38, 661
Difference.....	2, 405, 178	1, 128, 131	613, 365	1, 316, 094	95	5, 133

In two years the equipment, buildings, and grounds have advanced nearly two millions and a half, the paid-in endowment more than a million, and the annual income more than half a million, while the indebtedness is reduced a million and a quarter. The combined faculties have gained 95 members, and the student enrollment shows an increase of over 5,000.

The increase in endowment during this period can not be judged merely from the above tables, which represent actual sums paid in. In addition the educational jubilee, under leadership of this board, had subscribed up to June, 1917, something over nineteen millions, though exact figures are not available until the close of the campaign in 1918.

THE STUDENT LOAN FUND.

An important function of the board is the administration of the student loan fund, by which 2,062 students received financial aid in 1917. With a few exceptions, only persons studying in schools or colleges of the church may receive loans. The fund is derived from the annual Children's Day collection in the churches, which in 1917 totaled \$99,000. The church, therefore, contributes nearly \$100,000 each year to the cause of education in addition to the public educational collection.

The loan fund began operation in 1873; since then in all 24,935 students have received loans.

Of the 2,062 aided last year, the intended callings are:

Ministry	828
Missionary	133
Ministry and missionary	28
Teaching	536
Other callings	537
Total	2, 062

The loans bear no interest if paid within five years after graduation. As soon as money is returned it goes into the available fund and is loaned out again.

NEGRO EDUCATION.

Special work for colored people in the Southern States is under the care of the Freedmen's Aid Society of the Methodist Episcopal Church. For this purpose the following institutions have been

established: Gammon Theological Seminary, Atlanta, Ga.; Meharry Medical College, Nashville, Tenn.; Flint-Goodridge Hospital and Nurse Training School, New Orleans, La.; Bennett College, Greensboro, N. C.; Claflin College, Orangeburg, S. C.; Clark University, Atlanta, Ga.; Samuel Huston College, Austin, Tex.; New Orleans College, New Orleans, La.; Rust College, Holly Springs, Miss.; George R. Smith College, Sedalia, Mo.; Philander Smith College, Little Rock, Ark.; Walden College, Nashville, Tenn.; Wiley College, Marshall, Tex.; Central Alabama Institute, Birmingham, Ala.; Cookman Institute, Jacksonville, Fla.; Gilbert Industrial Institute, Baldwin, La.; Haven Institute, Meridian, Miss.; La Grange Academy, La Grange, Ga.;¹ Morristown Normal and Industrial College, Morristown, Tenn.; and Morgan College, Baltimore, Md. Princess Ann Academy and Virginia Collegiate and Industrial Institute, Baltimore, Md., are two schools affiliated with the last-named institution.

At Bennett College, Claflin College, Clark University, Samuel Huston College, New Orleans College, Rust College, Philander Smith College, Walden College, Wiley College, and Morgan College, college preparatory, high school, academic, and normal training are carried on extensively, with a small college course for a few of the students who feel that they need the larger preparation either for entrance into professional schools or for the higher grades of teaching.

At Central Alabama Institute, Cookman Institute, Gilbert Industrial Institute, Haven Institute, Morristown Normal and Industrial College, George R. Smith College, Princess Anne Academy and Virginia Collegiate and Industrial Institute until recently at Lynchburg, Va., now at Baltimore, Md., primary and grade work, with high school, academic, college preparatory, and normal training are carried on. At many of the schools primary and grammar classes are kept up, partly for teacher-training purposes and partly to supplement the insufficient facilities for colored children provided in the public schools.

Industrial departments are maintained at Claflin College, Samuel Huston College, Gilbert Industrial Institute, and Morristown Normal and Industrial College. Agriculture including gardening is taught at Bennett, Claflin, Samuel Huston, George R. Smith, Wiley, Central Alabama, Gilbert, and Morristown.

The curriculum for all of these schools is prepared by the Freedmen's Aid Society and approximates the requirements for similar grades in schools generally throughout the country. Of necessity the same standards can not be maintained as in those sections of the country where teachers have been trained for generations, and the

¹ The property is used by the public school.

school systems have the advantages of modern libraries. Nevertheless, everywhere there is the purpose to advance the standards of promotion and graduation up to the highest requirements of the best schools anywhere throughout the country. Grade records are kept in all the schools and promotion is entirely on the basis of the work accomplished.

The entire attendance at all of these schools last year was 5,864. The cost of maintenance for the year 1916-17 was \$436,034.30, of which the Freedmen's Aid Society contributed \$130,360.03. The balance was in student fees, board bills, and the contributions of the colored conferences in which the institutions are located.

DEACONESS SCHOOLS.

The general deaconess board of the Methodist Episcopal Church, in addition to supervising the deaconess work throughout the church, carries on important educational work. There are now in successful operation 56 deaconess homes, 25 hospitals, 23 mission and settlement houses, 11 training schools, 23 rest and summer homes, 6 homes for the aged, 8 children's homes, 11 girls' homes, 1 boys' school, 2 girls' schools, and 1 boys' and girls' school. These institutions are located in 89 different cities and towns of the United States and represent property and endowment of \$8,270,143.

EDUCATIONAL WORK OF THE METHODIST EPISCOPAL CHURCH, SOUTH.

By W. E. HOGAN,

Assistant Secretary, Board of Education.

Exclusive of a score or more schools which the Home Department of the Board of Missions maintains for dependent and delinquent girls, and for children of foreign-speaking people, the educational institutions of this church, within the United States, are as follows: Universities, 2; colleges of liberal arts, 29; junior colleges, 24; academies, or secondary schools, 26; mission and missionary training schools 4; total, 85. The value of the grounds, buildings, and equipment of these 85 institutions is \$15,641,244. The amount of their combined endowment is \$8,985,874. Their gross assets are therefore \$24,627,118. The annual income of these institutions was last year \$2,140,714. The total enrollment was 19,736.

CLASSIFICATION AND STANDARDIZATION.

Although the Methodist Episcopal Church, South, has been one of the pioneers among the denominations in providing the necessary

boards and commissions for standardizing and classifying its educational institutions, it was not until within the last two years that this work has been done with anything like completeness or satisfaction. As early as 1898 the church, through its General Conference, created what is known as the commission on education. This commission is composed of 10 practical educators appointed quadrennially, whose duty it is "to protect the educational standards of the church." At least once in four years this commission meets and issues a carefully prepared report in which it prescribes the minimum requirements as to admission and graduation standards, teaching force, income, and endowment to be demanded of the several classes of institutions. To the board of education of the church is then committed the task of ascertaining the financial condition and the equipment, as well as the amount and quality of the work done in all the educational institutions, and to classify each according to the relation of its equipment and the quality of its work to the standard established by the commission. Like all other agencies which have undertaken the work of classifying a number of colleges differing so widely in material equipment and academic standards, the board has found this to be a very difficult task. The commission would fix quadrennially definite and specific requirements to be demanded of the different classes of institutions of the church, but because of the large number of institutions organized as four-year colleges but unable to meet the college standards, provision was made for carrying temporarily a list of "unclassified institutions." Although this work of correlating and organizing its schools into one harmonious system was carried on by the church through its board of education and its commission on education with more or less success for a number of years, and this list of "unclassified institutions" gradually grew smaller, it was not until the General Conference of 1914 that legislation was enacted which made possible the classification of all the schools of the church.

It is interesting to note that the junior college movement assisted materially in making possible the complete elimination of the list of "unclassified institutions." Although the commission had made no provision for the junior colleges up to 1914, a dozen or more of the colleges of the church were attempting only two years of college work, the freshman and the sophomore, and were calling themselves junior colleges. The sixth report of the commission, issued in August, 1914, prescribed definite standards for academies, junior colleges, colleges, theological seminaries, and universities, and gave explicit directions that every institution of the church should be placed in one of the classes and that this classification, based on the new requirements and standards, should be made not later than the sum-

mer of 1916. Accordingly in September, 1916, the board of education, with great care, made a thorough classification of all the institutions of the church. The elimination of the list of meaningless "unclassified institutions" has been therefore one of the important educational achievements of this church during the last two years.

THE CORRESPONDENCE SCHOOL.

A unique feature of the educational work of the Methodist Episcopal Church, South, is the correspondence school which the board of education has maintained for 16 years. The purpose of this school is to give instruction through correspondence to the young preachers pursuing the four-year courses of study required of them for admission into annual conferences. During the 16 years of its operation this correspondence school has proven to be a most valuable agency for the training of preachers. It gives instruction annually to about 1,000 young preachers. Heretofore these men have not been required to take their conference courses of study through the correspondence school, although they were strongly urged to do so. But, beginning with the conference year 1918-19 all of the young preachers must take their annual conference courses of study through this school. This will increase the enrollment about 50 per cent. At present (July, 1916) the instruction is given by the members of the faculty of the Candler School of Theology of Emory University. But the General Conference this year authorized the board of education to divide the work of the school between the two universities of the church, so that the territory east of the Mississippi River will be served by the Candler School of Theology at Atlanta, Ga., and that west of the Mississippi by the School of Theology of Southern Methodist University at Dallas, Tex. The work will continue to be done under the general supervision of the board of education, but instruction is to be done by members of the faculty of the two schools of theology.

RELIGIOUS EDUCATION.

Along with other denominations, this church recognizes the increasing importance of distinctively religious education. During the last two years the board of education has made surveys of the religious instruction provided in the institution of the church and the need for religious education of students in State institutions. As never before, the church's obligation to provide for the religious education of all its children and youth is being recognized by both educators and churchmen. The increased emphasis which is being placed upon this important work by the Methodist Episcopal Church, South, is

shown by the recent establishment of the following new agencies for promoting religious education as distinct from secular education:

1. *A joint committee on religious education.*—This committee consists of 10 members, 5 appointed from the Sunday school board and 5 from the board of education, and to it has been committed the duty of promoting specific religious instruction in the educational institutions of the church.

2. *Annual conference commission on religious education in State institutions.*—Provision has this year been made for the creation in each of the 40 annual conferences of a commission for the purpose of providing for the religious education of students in State institutions. Upon the approval of the annual conference, this commission is empowered to employ a director of religious education at those charges in which are located State institutions. The five annual conferences in Texas and the three in Missouri had already begun this work at the seats of the universities of these States even before this commission was provided for, and the authorities of the church and of the universities have been working in perfect harmony and genuine cooperation.

3. *Secretary of department of ministerial supply and training and of religious education.*—For some years the board of education has maintained a department of ministerial supply and training to which a secretary has given all his time. But the proposed division of the work of the correspondence school and the election of a director at each of the two schools of theology will relieve this secretary of much of his work, so far as it relates to ministerial training. The board has, therefore, elected him to the office of "secretary of ministerial supply and training and of religious education," with the understanding that he is to give practically all of his time to questions pertaining to ministerial supply and religious education. Beginning with the college year 1918-19, therefore, the board is to have a secretary to whom is committed the specific task of promoting distinctive religious education in colleges of the church, in State institutions, and wherever else he deems it practicable.

AID TO NEGRO EDUCATION.

This church does not own and control outright any Negro school, but jointly with the Colored Methodist Episcopal Church it owns Paine College, Augusta, Ga. In addition to its contributions to this school the church has also been making small annual donations to five or six of the schools belonging entirely to the Colored Methodist Episcopal Church. In recent years approximately \$20,000 have been given annually through the board of education and the home department of the board of missions to Negro schools. Much more

than this amount was given in response to appeals at annual conferences and elsewhere, but that has been the amount officially and definitely set aside for certain specific work in Negro schools.

But the General Conference of 1918 was much more responsive to the educational needs of the Negro than any previous General Conference has been. The program which the General Conference of this year has laid out includes: (1) An annual assessment upon the entire church of \$55,250 for colored work, one half of which is to be administered by the board of education and the other half by the board of missions. (2) The missionary centenary movement, which proposes to raise \$35,000,000 in the church within the next five years, carries with it a program of about \$1,000,000 for the religious welfare of the Negro, about \$400,000 of which is to go to Paine College and \$250,000 is to be distributed equally among five other educational institutions of the Colored Methodist Episcopal Church.

CAMPAIGN FOR ENDOWMENTS AND PLANT IMPROVEMENTS.

In his annual report to the Board of Education in 1917 the corresponding secretary called attention to the financial needs of the whole educational field of the church and made certain specific recommendations for meeting these needs. After making a detailed analysis of the present educational situation, he declared it to be "of the greatest importance that the debts of our schools be paid; that endowment sufficient to insure to them at least a moderate annual income be secured, and that their buildings be made reasonably adequate." He recommended that the board endeavor to secure from the General Conference of 1918 the following action: (1) Fix a definite minimum sum as required to meet the educational needs for the next four years, request the church to contribute said sum, and authorize the educational forces to collect it. (2) Provide for an agency to apportion to each institution the amount which it should receive. (3) Provide for an agency whose duty it shall be to eliminate or combine superfluous schools in case it appears that such action is necessary. (4) Provide for an organization under whose general superintendency an educational forward movement shall be conducted.

The board thereupon directed that its corresponding secretary obtain detailed information from the institutions themselves as to the amounts necessary for them to secure "to enable them to carry on their work successfully." This direction was carried out with much care, and the secretary's quadriennial report to the General Conference in May, 1918, gave an itemized statement of the need of the several institutions. Not including the two universities the aggregate amount which the institutions need, according to their reports to the board of education, is \$13,208,655. The two uni-

versities reported that they should have within the next four years additional resources amounting to \$5,000,000 each. Recognizing the fact that to carry out successfully any movement to secure the \$23,000,000 needed to strengthen the institutions of the church would require the cooperative effort of all available agencies and that such cooperation would be impossible without the proper organization, the General Conference of 1918 enacted the following legislation looking to a great educational forward movement.

1. A church-wide campaign to raise \$13,000,000 for the schools and colleges of the church was approved and ordered. This campaign is to be "conducted under the general supervision of the General Conference board of education in cooperation with annual conference boards of education and college trustees."

2. A campaign for \$10,000,000 for the church's two universities—\$5,000,000 for Emory University, at Atlanta, Ga., and \$5,000,000 for Southern Methodist University, at Dallas, Tex.—was indorsed and ordered. The immediate conduct of this campaign was lodged in the boards of trustees of the two universities.

3. The organization of an educational association among the schools, colleges, and universities of the church. This association has already been organized. Its purpose is to foster the cause of Christian education, and it is expected that it will render invaluable aid in the conduct of the financial campaigns which have been ordered.

4. The board of education was authorized, if it deems wise, to make provision for a commission on consolidation to which shall be given "authority to investigate and advise with reference to the correlation, elimination, or consolidation of any educational institution or institutions of our church wherever one or more annual conferences request the board of education for such assistance."

There has been no more important achievement in the educational history of the last two years of this church than the securing of this legislation which makes possible the necessary organization and machinery for a unified, cooperative church-wide financial campaign for the endowment and plant improvement of all those institutions of learning which the best educational thought of the church believes should be maintained and strengthened.

EDUCATIONAL WORK OF THE BAPTIST CHURCH, NORTH.

By FRANK W. PADELFORD,
Executive Secretary Board of Education.

The educational interests of the Northern Baptists are fostered by two denominational agencies, the board of education and the American Baptist Home Mission Society. The latter owns and directs

the schools for Negroes and Indians. All other educational interests are directed by the board of education. The denomination, as such, however, does not own or control its schools for the American whites. They are all under the direction of boards of trustees, most of which are self-perpetuating. While the denomination supports and fosters many schools, it wishes them to be free from denominational control.

The Baptists of the North have 8 theological seminaries; 9 training schools mostly for preparing ministers for non-English-speaking churches, 22 colleges, 10 junior colleges, and 20 academies. These institutions enroll 28,286 students, have property worth \$31,525,203 and endowments of \$49,084,299.

The Baptist Church, North, owns and controls through its Home Mission Society 23 schools for the Negroes of the South, 13 being of college grade and 10 of secondary grade. It owns one school for the higher education of the Indians and several for elementary education. It also conducts one school in Cuba and one in Porto Rico. The total attendance at the missionary schools is 8,073, of whom 2,396 are receiving some form of industrial training and 444 are preparing for the ministry. These school properties are valued at \$1,454,000.

In 1915 the denomination adopted a program of advance for a five-year period. The educational items in that program are as follows: "Student pastors in 25 universities, 15,000 Baptist students in colleges and universities, 1,000 Baptists students in theological seminaries, and \$6,000,000 additional equipment and endowment for our schools at home and abroad." Until our entrance into the war the church was making rapid progress in the attainment of each of these goals, but the war has caused a serious setback. We had student pastors or assistants in 19 universities. The exact number of Baptist students in colleges was unknown, but we had 17,841 students in our Baptist colleges. The number of students in our theological institutions was 997. There has been a serious decrease in all these directions as a result of the war.

The financial program of the Church for its schools has not been seriously affected as yet. During the three years 1915-1918 there have been added to the funds of our institutions \$10,568,094. Thus in three years we have surpassed the goal set for five years. During the year 1917-18 the additions have amounted to more than \$3,500,000.

The most important development of the last two years has been the decision of the board of trustees of the University of Chicago to found a graduate medical school of the highest grade. The original foundation for this school will be \$15,000,000, a half of which had been subscribed when war was declared. The project is only temporarily delayed by the war. It is the intention of the trustees to found the school at the earliest possible moment. The Middle

States will then have a graduate medical school of the grade of Johns Hopkins.

During the past year another consolidation has taken place in Iowa. Union College, located at Des Moines, which is a result of the consolidation two years ago of Central University and Des Moines College, has now absorbed Highland Park College and purchased its property in Des Moines. This has assured one strong institution in the place of three weaker ones.

The board of education has just embarked upon a project to raise a large fund, the interest of which shall be devoted for a period of five years following the close of the war, or so long as may be necessary, to assisting Baptist boys who have been in the Army and Navy in completing their education. Large numbers of boys left for the war with their education only partially completed. Many of them will wish to return and the church intends to assist them in finishing their education.

The Baptist Church, North, has maintained an increasingly extensive work among the Negroes of the South since the days of their liberation. The most important of its institutions are Spelman Seminary for girls at Atlanta, Ga., with an enrollment of 780; Benedict College at Columbia, S. C., with an enrollment of 694; Shaw University, Raleigh, N. C., an institution with full collegiate department and several graduate schools, with an enrollment of 402. The one school for the higher education of the Indians is Bacone College at Bacone, Okla., with an enrollment of 266.

The church maintains schools for training ministers for the new populations in America among the Danes, Hungarians, Norwegians, Russians, Slovaks, Swedes, and Germans.

SOUTHERN BAPTISTS AND EDUCATION.

By J. W. CAMMACK,

Secretary, Education Commission of the Southern Baptist Convention.

In the 17 States which cover the territory of the Southern Baptist Convention are more than two and three quarter million white Baptists who are enrolled in the churches. A number of their colleges were founded around the year 1825. In their organized educational work Southern Baptists were preceded by the Northern Baptists, who founded Brown University in 1764 and who gave to Harvard University its first president. For many years Southern Baptists shared the poverty which was general in the South. Many of their members are in the rural districts and very much of whatever progress has been made in rural free schools in the South has been due to the initiative of Baptist country pastors and to the voluntary gifts, in addition to the school levy, from Baptist men and women.

THEOLOGICAL SCHOOLS.

For the training of ministers and mission workers Southern Baptists have the Southern Theological Seminary at Louisville, Ky., the Southwestern Theological Seminary at Fort Worth, Tex.; and the Baptist Bible Institute at New Orleans, La. The first of these has more male students than any other theological seminary in this country, the number, in 1917, being 322. The institute at New Orleans opened its first session in September, 1918. In the other two institutions, in 1917, were 474 men and 217 women; the latter were taking training for mission and social settlement work. Their property was valued at \$1,100,000 and the endowment amounted to \$1,645,000.

COLLEGES AND UNIVERSITIES.

Southern Baptists have 38 schools of college and university grade. Not all of these have reached the standard college grade, according to the Southern Association of Schools and Colleges, but are giving four years of college work beyond the standard high school. In these, in 1917, were 399 male and 376 female teachers, and 5,433 male and 6,851 female students. The property was valued at \$8,563,493 and the productive endowment at \$5,370,000. Their income amounted to \$1,420,289.

JUNIOR COLLEGES.

A system of junior colleges, giving two years of standard college work, in addition to high-school courses, is being developed by Southern Baptists. There are 15 of these, and in 1917 there were in them 671 young men and 2,272 young women. Their property is valued at \$2,000,000. Most of these schools are unendowed. Several of them are supported in part by annual gifts from the churches.

ACADEMIES.

Of the high-school grade, Southern Baptists have 77 institutions. These give from 14 to 17 units credit for work done, and prepare students for universities and colleges. In them, in 1917, were 5,851 boys and 5,029 girls. Their property is valued at \$2,335,250.

ORPHANAGES.

School work is done in 13 orphanages which are under control of Southern Baptists. In some of these the work is carried on up to the eighth grade, and some give four years of high-school work. In the schools of these institutions in 1917 were 877 boys and 965 girls. Their property is valued at \$2,000,000. Thus the total number of

schools fostered and controlled by white Southern Baptists is 145. The total number of students is 28,640. The property value is \$15,993,000, and the endowment amounts to \$7,343,000.

PRESENT PROGRAM.

At the last meeting of the Southern Baptist Convention, in May, 1918, a program was unanimously adopted which definitely calls for the securing of \$15,000,000 for new equipment and endowment for denominational schools within five years, and an enrollment in the schools of 35,000 students. A part of this program is to bring 25 of these schools up to the requirements of standard colleges according to the standards of the Southern Association of Schools and Colleges.

EDUCATIONAL WORK OF THE PRESBYTERIAN CHURCH IN THE UNITED STATES OF AMERICA.

By M. C. ALLAREN,

Superintendent of Schools, Woman's Board of Home Missions.

The educational activities of the Presbyterian Church in the United States of America are for the most part covered by the reports of (a) the Woman's Board of Home Missions, (b) the Board of Missions for Freedmen, and (c) the College Board. The church is making contributions to the cause of education throughout the United States as well as in Alaska and Cuba and Porto Rico. Mention should be made of the fact that one boarding school, namely, the Polytechnic Institute of Porto Rico, is under the Board of Home Missions of the Presbyterian Church in the United States of America.

The task of the Woman's Board of Home Missions is primarily to establish and maintain grammar and secondary schools at strategic points throughout the United States, among communities deprived by location, race prejudice, environment, or for some other reason of the advantages of public-school education or Christian influence and training. Through the mission schools established in such centers appeal is made to the moral and spiritual sides of life, and the resulting tendency is almost invariably a general mental awakening and improved standard of living. The course of study followed in the mission schools is similar to that of the State public schools, with particular stress on industrial training, so that when boys and girls leave these schools they may be well equipped for the successful undertaking of life in a rural environment, both as useful citizens and as home makers.

There are also Presbyterian schools in immigrant communities. These are controlled on a different basis from the others, the work

being administered locally, although the funds pass through the hands of the board.

The officers of the Woman's Board and the College Board are located at 156 Fifth Avenue, New York City; the headquarters of the Board of Missions for Freedmen are 513 Bessemer Building, Sixth Street, Pittsburgh, Pa.

The following is a résumé of statistics of boarding and day schools of the Woman's Board of Home Missions: Boarding schools—commissioned workers, 185; enrollment, 2,159; average attendance, 1,663; Sunday-school scholars, 1,636; young people's society members, 866; number united with church, 159; schools, 21. Day schools—commissioned workers, 33; enrollment, 1,145; average attendance, 748; Sunday-school scholars, 508; young people's society members, 146; number united with church, 7; schools, 17. The figures for enrollment and average attendance are obtained from the annual reports covering the school year 1916-17. All other statistics are for the calendar year 1917.

The Board of Missions for Freedmen has for its task the greatest possible contributions toward the educational development of the Negro race in the South. This is a problem which has confronted the church ever since the emancipation of the Negro 50 years ago, until now it is concerned with more than 8,000,000 colored people, largely in rural communities, scattered throughout 13 States. When the fact is considered that 30 per cent of these 8,000,000 people are illiterate, it can readily be seen that the church is committed here to a most important work.

The schools maintained by this board have a property value of approximately \$1,100,000.

Number of day schools.....	140
Number of teachers in day schools.....	420
Number of boarding schools.....	27
Total number of schools.....	167
Enrollment.....	18, 108

The College Board was organized by the General Assembly of the Presbyterian Church in 1883. It represents the church in its work and relations with educational institutions, including those of college and university rank, as well as academies and special schools. Its function is to aid in the establishing and strengthening of such institutions. In this it differs from the board of education of the Presbyterian Church, the function of which is to aid students and to carry on religious work among Presbyterian students in tax-supported institutions.

Presbyterian colleges are so called for various reasons. Some are connected with the church by means of a charter provision requiring their trustees to be elected by an ecclesiastical body, such as a pres-

bytery or synod, or that all or a part of the trustees be members of the Presbyterian Church. Sometimes both of these charter requirements exist.

The relation thus established between the church and the institution is commonly called the "organic" relation. Other colleges called "Presbyterian" are so by reason of historical associations and the fact that a majority of their students and friends have been members of this church. Among such institutions are Washington and Jefferson College, Hamilton College, Coe College, and others.

The relation of the College Board to a Presbyterian college is an administrative or financial relation, not an ecclesiastical relation. This board gives out of its treasury from time to time whatever funds may be available toward the endowment or current support of certain Presbyterian colleges needing such help. The number of such institutions thus aided varies from year to year. With other colleges not receiving such financial aid the board sustains an advisory relation, counseling from time to time with boards of trustees or with presidents on matters of policy or administration.

During the college year closing June, 1917, there were in the list of institutions sustaining the above relations with the College Board 1 university, 44 colleges, 7 special and technical schools, 3 junior colleges, and 6 secondary schools. These institutions reported a net total enrollment of 27,180 students; a total income for current expenses during the year of \$4,446,936; a total value of grounds, buildings, and equipment of \$21,370,088; and productive endowment funds totaling \$17,060,056.

EDUCATIONAL WORK OF THE PROTESTANT EPISCOPAL CHURCH.

By WILLIAM E. GARDNER,

General Secretary, General Board of Religious Education.

The educational field of the Episcopal Church contains 12 theological seminaries, 3 church colleges, 112 church preparatory schools, and 7,000 Sunday schools. There are no separate boards of education or independent controlling organizations in charge of these agencies. With the exception of the General Theological Seminary, located in New York, which is under the control of the General Convention of the Church, all the institutions are directed by boards of trustees that are self-perpetuating or elected by diocesan conventions.

To unify all the educational work, the General Convention, which meets once in three years, has authorized a general board of religious education and committed to it the "unification and development" of all the educational agencies of the church. As the board

has been at work since 1913, a description of its organization and administration will represent the educational movements within the Episcopal Church.

The board is organized into four departments:

(1) The Department of Parochial Education studies and develops all the educational agencies within the parish, i. e., in Sunday schools (now called church schools), in the various efforts to stimulate Christian ideals in the home, and in the educational opportunities in clubs, guilds, and societies maintained by the parish.

(2) The Department of Secondary Education surveys the standards of religious education within the preparatory schools, organizes cooperation and conferences among the teachers and principals, and discovers the best methods of administration.

(3) The Department of Collegiate Education aims to strengthen the student in loyalty to the church, to further his religious education by the study of Christianity and church life, and to train him for Christian leadership. This department accomplishes much work through a national student council organized and conducted by the professors, college pastors, and students.

(4) The Department of Theological Education strives to raise the standards of the educational requirements for the ministry and to keep them in harmony with changing social conditions; it devises and promotes plans for recruiting the ministry and encourages the establishment of financial aid in the form of scholarships and fellowships.

All these departments call councilors to their aid. These are chosen because they are expert or practical workers in some particular educational field. At all times there are at least 50 persons giving volunteer and expert service as councilors.

Auxiliary to the general board and also organized by vote of the General Convention are eight provincial boards of religious education, one in each of the eight provinces of the church. These boards exist for the purpose of putting into operation the plans of the general board in so far as they are possible within the province, and to report to the general board educational conditions within the province.

Within each of the hundred dioceses there is a diocesan board of education, or a commission or an educational committee. These deal with local problems and apply principles and methods recommended by the general board.

With this view of the educational organization of the Episcopal Church, the following paragraphs will deal briefly with some of the activities which have commanded the attention and administration of these various boards.

CHRISTIAN NURTURE.

A general unity of organization and purpose has been introduced into the course of studies in the church schools of the various parishes. A system of Christian education from the home through adolescence has been defined, published, and in a large measure accepted. It is called the Christian Nurture Series, because it is committed to two fundamental principles: First, it believes in putting the child in the center; in other words, it recognizes the law of growth as the highest consideration. The plan of teaching is determined more by the kind of material capable of feeding the child's spiritual life than by the desire to have certain subjects studied. Secondly, the Christian Nurture Series recognizes a training in religion which is more than mere teaching. This training includes, but does not end with, instruction in truth. There must be a development of loyalty to the church, a fostering of the inner spiritual life, and a constant practice in Christian helpfulness.

Care has been taken to secure an orderly advance from course to course, each one being built upon previous instruction, and leading up to that which follows. Each lesson has a specific aim stated, and these aims in succession make a clearly defined pathway up which the child is led to the goal appropriate to each period of his development.

On account of the great diversity in grading in various schools and dioceses, no attempt is made to assign certain courses to definite departments; as, for instance, primary, junior, and senior. Each school is left to make the adjustment for itself as to where one department ends and another begins. Approximate ages at which the instruction is appropriate are suggested.

The course is not Bible-centric. While all the valuable material in the Bible is ultimately placed before the pupil, there is a five-fold aim throughout the entire series; the study of the Scripture, training the memory, training in church loyalty, training in devotional life, and training in community service; all find place in each course, to the end that the young Christian is helped to give expression to his Christianity as he studies it.

During 1917, 108,000 teachers and pupils studied this course.

A BETTER EQUIPPED MINISTRY.

The board has also given much attention to the new studies which should enter into the training of the minister in order that he might fulfill the new demands made upon the church. The General Convention of the Episcopal Church in 1916 instructed the board to make a study of the training of the minister and formulate such

new canons as the study would reveal to be necessary. The board committed the task to a council composed of men, some of whom were expert in theological education and others ministers in various types of communities, and therefore familiar with the new demands made upon the church by modern life. They proposed five principles upon which should be based any requirements for the education of the ministry. The first principle is that there should be a full normal standard, formulated by the canons of the church, mandatory in character, put to the fore as descriptive of the church's mind, and expressed in simple and general terms intended to indicate subjects only.

The second principle is that of electives. To the above normal standard should be added the requirement that each candidate for the ministry must offer some electives in order that some degree of specialization may take place in his preparation.

The third principle has to do with a minimum standard, which shall be sufficiently low and elastic to meet all proper needs and conditions, but this standard must be reached by the process of obvious subtraction and departure from the full normal standard, and shall be strictly limited to well-defined special cases.

The fourth principle defines these special cases to be (a) men of 30 years or over, (b) men of other race or speech, (c) men who desire to minister in a localized field.

The fifth principle concerns the interpretation and definition of the subjects of examination and places the responsibility upon bishops and examining chaplains, with the advice and counsel of the general board of religious education.

Around these five principles is gathered the discussion regarding the education of the minister and the method of his admission into office. The new canon will be presented to the general convention, which meets in Detroit in October, 1919.

THE APPROACH TO STUDENTS.

The Episcopal Church has approximately 500 professors and 17,000 students in colleges and State universities. In order to reach these and make them feel that their period of academic study is not a period of separation from the church, the general board has organized the national student council, which is the medium by which the church approaches the student with requests for study, worship, missionary giving, and enlistment, and community service. In all the colleges and State universities are local organizations of Episcopal students, in some cases affiliated with the Christian association. These are called "units." A unit becomes a member of the national student council when it agrees to fulfil the following minimum program:

(1) *Worship*: The unit shall make provision for attendance at a church service once a week, which if possible shall be the holy communion, and shall also make provision for a monthly corporate communion.

(2) *Religious education*: The unit shall make provision for religious education under church auspices at least during Advent and Lent.

(3) *Church extension*: The unit shall undertake to extend the church both in the college and throughout the world by personal prayer, work, and contributions.

(4) *Service*: The unit shall provide opportunities for personal service in the church and in the community.

(5) *Meetings*: At least four meetings of the unit shall be held each year.

The advantages of this council are many: First, it unifies the approach of the church to the student. The appeals made by the various organizations of the church for the attention, interest, and investment of the student are rapidly increasing. By this national student council they come in an orderly process and receive at all times the best attention of the student. Secondly, the national student council is a democratic organization; its control rests with the students and with the members of the faculty, who are Episcopalians. These two groups always constitute a majority. And in the third place, the council makes no attempt to define the type of local organization. Any society within the college or any group of Episcopalians who are willing to fulfill the minimum program may be recognized as a unit. The emphasis is not on the organization, but on the plan of work.

WEEK-DAY RELIGIOUS INSTRUCTION.

The board is active in promoting week-day instruction in religion. For many years it has maintained a day school for religious instruction in connection with the public schools of Gary, Ind. This is an experimental station. Here are tried out those methods of cooperation with the public school which will render religious instruction a part of the child's total education. This school has demonstrated that it is practicable to maintain a week-day religious school and that the children will attend such a school regularly and study as hard as in the public school.

This experimental station has had a good deal to do with developing public sentiment, which is more and more coming to sustain religious day schools cooperating with public schools.

Closely related to the Gary experiment is the encouragement given to religious instruction by the credits offered in certain high schools throughout the land for work done in the Bible outside of school time. The action of the State board of Virginia is typical. By arrangements with the University of Virginia, an official syllabus

of Bible study for high-school credits has been published and has become operative. All Saints, Lakewood, N. J., and Grace Church, Grand Rapids, Mich., are types of parishes where arrangements have been made with public-school authorities so that the church conducts Bible study, for which credit is given in the public schools.

SUMMER SCHOOLS.

The general board through its provincial and diocesan boards has facilitated the movement of summer schools. In the summer of 1918, 21 summer schools were held in various parts of the United States. A few were exclusively for clergy; the others were for church workers. In many cases in these summer schools courses are now given so that the work done may count for credits toward a diploma of the general board. Under this plan a portion of the work is done in summer schools and another portion through correspondence or home reading, with examination.

TEACHER TRAINING.

The war has revealed more clearly than ever before the need of spiritual leadership in the life of the Nation. In a thousand ways it has shown that spiritual ideals control mankind, that the conscience of a nation can be at its best only when the citizens of that nation recognize and obey the laws of God. These convictions have become the basis of a vast movement for the training of all the religious teachers of the youth of the land in homes and schools. In the autumn of 1918 the general board did its share in a large interdenominational campaign by which thousands of teachers were encouraged to begin the study of a standard course of teacher training, containing 120 units, the completion of which would take three years. The unique feature of this standard course is its turning from the content of the Bible to the method of teaching Christianity. Such subjects as "How to teach the life of Christ," "How to teach the mission of the church," "How to train the devotional life," show conclusively that the church is seeking for definite methods in the accomplishment of its spiritual work with the young.

EDUCATION AND THE WAR.

Throughout the years of the war the board endeavored to stimulate widespread patriotic effort. The buying of Liberty bonds, of war-saving stamps, gifts to the Red Cross, the Young Men's Christian Association, and the Armenians and Syrian relief occupied the attention of the various institutions of the church.

Feeling the depression that would ultimately come over the country as the casualty lists came in, the board published and issued a pamphlet entitled, "Studies in Religion for War Times." This was circulated among the clergy and teachers of the church with the intention of providing material to maintain spiritual morale in the midst of personal loss.

LATTER-DAY SAINTS' SCHOOLS.

BY HORACE H. CUMMINGS,

General Superintendent L. D. S. schools,

I. HISTORY AND FUNCTION OF LATTER-DAY SAINTS' SCHOOLS.

In Utah, as in New England, parochial schools preceded the public schools. True, our State university was founded, so far as the legislative act was concerned, in 1850, less than three years after the Utah pioneers arrived, but it did not perform its functions as a university until nearly a quarter of a century later. The common schools were supported by tuition entirely until the later seventies, and from 1875 until little more than a decade ago most of the high-school work outside of the two largest cities was done by our church schools.

The reason for the maintenance of an expensive system of church schools, when the State schools are free and so efficient, is a widespread feeling that religious education, to be of force and value, must be given with the same care and efficiency and at the same stage of the child's development as secular education.

II. STATISTICAL.

The following brief table of statistics will show the number of schools in session during the last biennium; their location, number of teachers, highest enrollment, and average attendance. All of them give four years of regular high-school work, and the first six give, in addition, two years of college work in education to prepare teachers for the public schools, where there is always a great demand. The Brigham Young University offers full college courses and confers degrees.

Statistics of Latter-Day Saints' schools.

Name.	Location.	Number of teachers.	Enrollment.	Average attendance.
1. Brigham Young University.....	Provo, Utah.....	85	1,410	1,307
2. Brigham Young College.....	Logan, Utah.....	34	924	666
3. Dixie Normal College.....	St. George, Utah.....	25	403	372
4. Snow Normal College.....	Ephraim, Utah.....	13	332	238
5. Ricks Normal College.....	Rexberg, Idaho.....	25	473	401
6. Weber Normal College.....	Ogden, Utah.....	22	518	422
7. Big Horn Academy.....	Cowley, Wyo.....	7	118	110
8. Cassia Academy.....	Oakley, Idaho.....	7	165	152
9. Emery Academy.....	Castle Dale, Utah.....	7	109	94
10. Fiedling Academy.....	Paris, Idaho.....	10	250	214
11. Gila Academy.....	Thatcher, Ariz.....	9	226	167
12. Knight Academy.....	Raymond, Alberta, Canada.....	8	202	154
13. Latter-Day Saints' University High School.....	Salt Lake City, Utah.....	43	2,141	1,296
14. Murdock Academy.....	Beaver, Utah.....	8	201	160
15. Millard Academy.....	Hinckley, Utah.....	10	174	150
16. Oneida Academy.....	Preston, Idaho.....	12	227	213
17. Snowflake Academy.....	Snowflake, Ariz.....	7	138	116
18. St. Johns Academy.....	St. Johns, Ariz.....	6	86	77
19. San Luis Academy.....	Manassa, Colo.....	5	73	55
20. Uintah Academy.....	Vernal, Utah.....	7	225	156
21. Juarez Academy ¹	Colonia Juarez, Chihuahua, Mexico.....			

¹ Not reported.

The total disbursements for these schools for the biennium amounted to \$1,208,784.78.

The church also maintains eight theological seminaries and has authorized the establishment of seven more next year. These are classes held in small buildings owned by the church and located as near as possible to large State high schools, where a great many Latter-Day Saint children attend. The church furnishes a competent teacher who teaches the Bible to the high-school students at such periods during the day as will not interfere with their other lessons. The students get credit toward graduation for this work; otherwise there is no connection between the two.

In our missions on the islands of the Pacific about 40 small schools are maintained by missionaries and others. Most of these schools are small, but the Maori Agricultural College, in New Zealand, is an institution having a large enrollment of native young men.

Many other institutions of an educational character, such as Sunday schools, Young Men's Mutual Improvement Associations, primary associations, religion classes, etc., which are taught by volunteer teachers without pay, are maintained by the church, and most of its members belong to two or more of them. This organization calls into action nearly every member, as a host of teachers and officers are required to do this vast amount of work with its study and planning and responsibility to secure success in each individual case. This is a comprehensive system of practical education in social activities and public duties. Special courses are prepared for each organization, and each has a field of its own, while all together form a well-balanced whole.

III. TEXTBOOKS USED AND COURSES OFFERED.

Contemporaneous with the State, the church schools adopt uniform textbooks, which it does every five years, and follow closely the books adopted by the State. This is done in the interest of economy and efficiency, as we get a reduced price and adopt the latest and best texts. It also makes the work more uniform throughout this widely scattered system of schools.

The courses offered are similar to those given in State high schools, and include work in English, history, mathematics, languages, art, music, etc., and a liberal amount of industrial work. In fact, we claim to be pioneers in vocational school work, for as far back as 1877 President Brigham Young provided in a deed of trust, giving a large tract of land to the college at Logan which bears his name, that agriculture and mechanic arts as well as sewing and cooking should be taught to the students of the institution, and he hoped that the funds of the school would grow until it could give to each man graduating from it \$500 with his diploma to buy a team, wagon, and plow to enable him to go at once to work in the soil, so close were theory and practice connected in his mind. This impress has followed all our church schools until the present time.

IV. HOME PROJECT WORK.

The most important development in our school system during the biennium is what we call our home project work. It came about to meet a need of rural high schools, which are nearly all situated in farming districts. From the beginning, a great many young men and young women have been prevented, by the press of home work, from entering school when it began in the fall, or remaining until it closed in the spring, and, therefore, many of them would not enroll at all, and those who did were under a handicap. Winter courses were provided to meet this condition, but they overloaded the teachers with school work, as extra teachers could not be hired for a short winter term. Holding school on Saturdays and thus shortening the school year, was tried for a number of years, but this proved too strenuous for both teachers and students.

At length it was decided to shorten the school year two months, allowing the students a month longer at home in the harvest field in the fall, and another in the spring for plowing and planting. During the winter, book work is emphasized and classes are arranged so that the students can earn three units of credits, mostly in the intellectual, or cultural subjects. In the industrial subjects the students are assisted in projecting the work they will have to do at home during the summer, besides learning the fundamental principles of each subject taken. These home projects are properly prepared and

passed on by the teacher, then, after school closes for summer vacation, the teachers of industrial subjects visit the homes of the students once a week to see how the work is progressing. About one hour a day of study or reading is required during the summer, and for this work and study, one unit of credit is allowed, making it easy for each student to earn his regular four units of credit each year, and to graduate in four years, prepared to enter college, or the world of work.

The visiting teachers check up carefully on the home work, evaluating it as they do work done in school. They give the best expert advice concerning the care and treatment of crops, or stock, or cooking, or sewing, etc. Students give weekly reports to their teachers, who forward to the superintendent monthly reports of all the achievements of students.

Besides this work, the teachers check up on the social and church activities of students and keep a record of the number and kind of amusements attended, the religious services, church work, charities, those who attend regularly to their prayers, abstain from using tobacco, liquor, etc. This maintains the school standards throughout the whole year, and the boy who quits smoking to enter school does not resume the habit as soon as school closes. Not 1 per cent of our boys smoke after being in our schools a few weeks. When they live for four years in this way the force of the habit tends to keep them in line continually.

Some of the good results of this work, which was first tried out two years in one of our schools and is now required in all our rural schools, may be summed up as follows:

A much greater number of young people go to school.

All are able to earn full school credits and graduate in four years, as in the old way.

Labor is dignified and made more scientific and efficient.

Study is made more practicable and productive.

The school and home are brought closer together to the vast improvement of both.

The moral and social instincts are guarded and guided, and the high standards of the school maintained throughout the whole year.

Parents get the help of their sons and daughters for two more months in the year, and when it is most needed, which obviates the employment of transient labor, which is often unsatisfactory and even dangerous.

Better and more crops are raised, and all home work is improved.

It educates toward the farm instead of the city and prepares the children to take their parents' places on the farms, so that our best farms do not fall into the hands of foreigners, because parents from

the farms have sent their children to schools in cities for so many years that the children lose their love for the farm and refuse to live there.

While the experiment is still in its infancy, we have great hopes of it as solving some important problems of the home and school.

ROMAN CATHOLIC SCHOOLS.

By PATRICK J. McCORMICK,

Professor of Education, Catholic University of America.

The Catholic school system in the United States at present embraces elementary or parish schools, high schools, academies, colleges, ecclesiastical seminaries, universities, and a great variety of schools of a special or vocational type, such as novitiates, normal schools, industrial schools, schools for Indians, Negroes, orphans, etc. The elementary schools represent by far the largest division of the system. They are now established over the entire country, and are most numerous naturally in those dioceses where the Catholic population is greatest. A substantial growth is noticeable every year in their number and enrollment. Secondary and higher education has also consistently expanded in recent years, the biennium of 1916-18, in spite of war conditions, having been no exception. As there are important points of difference to be noted in the administrative arrangements for the various departments of the system each of them is reviewed separately in this report.

PARISH SCHOOLS.

The Catholic Church in the United States consists of 14 arch-dioceses and 87 dioceses. Each of these administrative divisions of the church in this country has its elementary schools. The total of these schools for 1917-18 was 5,748, a gain of 151 over the preceding year, 1916-17. The total of pupils was 1,593,407, an increase of 95,060 pupils in one year. The statistics in detail for each diocese may be found in the Official Catholic Directory (Kenedy, N. Y.).

The ordinary unit of administration for the elementary schools is the diocese. All parish schools consequently come under the immediate jurisdiction of the bishop, the head of the diocese. This is similar to the public-school system in which the administrative unit is the State. The diocesan systems are usually presided over by school boards and superintendents, or other officers appointed by the bishop of the diocese, another point of resemblance to the State system in the United States, whose ordinary governing authorities in school

matters are State education boards and superintendents. The following table shows the personnel of the diocesan school boards and officials for 1917-18:

DIOCESAN SCHOOL BOARDS AND SUPERVISING OFFICERS.

[Archdioceses are indicated by an asterisk (*).]

Ecclesiastical province.	Diocese or archdiocese.	Title of governing board and number of members.	Name and title of supervising officer.
Baltimore.....	*Baltimore.....	Examiners of teachers (2).....	Rev. Lawrence Brown, superintendent (Baltimore city).
		Examiners of schools: For Baltimore (4)..... For Washington (4)..... For rural districts (4).....	
	Richmond.....	Examiners of schools: Northern and western district (2). Southern and eastern district (2).	
	Wheeling.....	Examiners of schools: 3 district boards (1, 2, and 2)...	
	Wilmington.....	School board (4).....	
Boston.....	*Boston.....		Rev. Augustine F. Hickey, S. T. L., supervisor of schools.
	Burlington.....	School board (3).....	
	Fall River.....	Diocesan school visitors (2).....	Rev. W. J. Fitzgerald, S. T. L., diocesan supervisor of schools.
	Hartford.....		
	Portland.....	School visitors (4).....	
	Providence.....	Examiners of teachers (3)..... Examiners of schools (8)..... School board (13).....	Rev. John F. Conlin, P. R., diocesan school visitor; Rev. P. F. Doyle, assistant diocesan school visitor.
	Springfield.....		
Chicago.....	Alton.....	Diocesan school board (6).....	Rev. John P. Curran, superintendent of schools.
	Bellefonte.....	Diocesan school board (7).....	
	*Chicago.....	Diocesan school board (3).....	
	Rockford.....	School board: 4 district boards (6, 4, 4, and 4)...	
Cincinnati.....	Columbus.....	School board (5).....	Rev. A. E. Lafontaine, superintendent of schools. Rev. William A. Kane, superintendent.
	Detroit.....	Examiners of teachers (6)..... School board: 6 district boards (15, 12, 3, 3, 3, and 3).	
	Fort Wayne.....	Diocesan school board (9).....	
	Cleveland.....		Rev. S. A. Stritch, D. D., supervisor of diocesan schools.
	Grand Rapids.....	School board (6).....	
Dubuque.....	Louisville.....	School board (10).....	
	Nashville.....	Examiners of teachers and diocesan school board (7).....	Rev. P. Grosnick, secretary and superintendent.
	Toledo.....	School board (7).....	
	Davenport.....	School board (10).....	
	Lincoln.....	Diocesan school board (3).....	Rev. L. J. Harrington, school examiner. Rev. J. B. O'Leary, diocesan director of schools. Rev. Thomas V. Tobin, superintendent.
	Omaha.....	Diocesan examiners of teachers (10)..... Diocesan school board (10).....	
	Sioux City.....	Diocesan school board (6).....	
Milwaukee.....	Green Bay.....	Diocesan school board (4).....	
	La Crosse.....	School board (7).....	Rev. L. J. Kavanagh, superintendent.
	Marquette.....	School commission (7).....	
	*Milwaukee.....	Diocesan school board (8).....	
New Orleans.....	Superior.....	School commission (3).....	
	Dallas.....		Rev. L. J. Kavanagh, superintendent.
	Galveston.....	Diocesan school board (3).....	
	Little Rock.....	Diocesan school board (7).....	
	Mobile.....	Diocesan school board (6).....	
	*New Orleans.....	Catholic board of education (15) (10 ecclesiastics, 5 laymen).	

DIOCESAN SCHOOL BOARDS AND SUPERVISING OFFICERS—Continued.

Ecclesiastical province.	Diocese or archdiocese.	Title of governing board and number of members.	Name and title of supervising officer.
New York.....	Albany.....	Diocesan school board (11).....	Rev. Joseph A. Dunneay, inspector of schools.
	Brooklyn.....	Kings County school board (20).....	Rev. Joseph V. S. McClancy, inspector of schools.
		Queens County school board (5).....	
		Nassau County school board (4).....	
		Suffolk County school board (5).....	
	Buffalo.....	Diocesan school board (6).....	Rev. Francis T. Kanaley, superintendent of parochial schools.
	Newark.....	School board (18).....	Rev. John A. Dillon, superintendent of schools; Rev. William F. Lawlor, assistant superintendent of schools.
	*New York.....	New York City and Yonkers school board (23).	Rev. Joseph F. Smith and Rev. Michael J. Larkin, superintendents of schools.
		Westchester County school board (5).	
		Orange and Rockland Counties school board (5).	
		Catler and Sullivan Counties school board (4).	
		Putnam and Dutchess Counties school board (4).	
New York.....	Ogdensburg.....	School board (5).....	Rev. Joseph S. Cameron, superintendent of schools.
	Rochester.....	School board (2).....	Rev. Charles F. McEvoy, superintendent of schools.
	Syracuse.....	School board (7).....	Rev. William J. McConnell, superintendent of parochial schools.
	Trenton.....	Examiners of teachers (3).....	Rev. Edwin V. O'Hara, diocesan superintendent of schools.
Oregon.....	*Oregon City.....	Diocesan school board (6).....	Rev. John M. Gannon, D. D., D. C. L., superintendent of schools.
Philadelphia.....	Erie.....	.....
	Harrisburg.....	School board (11).....	
	*Philadelphia.....	Diocesan school board (11).....	Rev. John E. Flood, superintendent of parochial schools; Rev. William P. McNally, assistant superintendent.
	Pittsburgh.....	Examiners of school teachers (10).....	Rev. Ralph L. Hayes, superintendent of schools.
		Diocesan school board (23).....	
		Diocesan school board (3).....	
Ruthenian-Greek.			
St. Louis.....	Concordia.....	Diocesan school board (5).....	
	Kansas City.....	Diocesan school board (6).....	
	Leavenworth.....	Diocesan school board (10).....	
	*St. Louis.....	Diocesan high-school board (3).....	
		Diocesan school board (14).....	Rev. Patrick Dooley, superintendent of schools.
	Wichita.....	Diocesan school board (4).....	
St. Paul.....	Bismarck.....	Parochial school board (5).....	
	Crookston.....	School board (9).....	Rev. John P. Funk, diocesan superintendent of schools.
	Duluth.....	School board (11).....	
	Fargo.....	.....	Very Rev. J. Baker, V. G., inspector of schools.
	St. Cloud.....	Diocesan school board (5).....	
	*St. Paul.....	School board (6).....	
	Sioux Falls.....	Diocesan school board (5).....	
	Winona.....	School board (7).....	
San Francisco..	Monterey-Los Angeles.	Inspectors of diocesan schools (9).....	
	*San Francisco.....	.....	Rev. Ralph Hunt, S. T. L., superintendent of schools.
Santa Fe.....	Denver.....	School board (4).....	

It will be observed that of the 14 archdioceses, and 87 dioceses, a total of 67 have some form of school supervision provided. This is more remarkable since many of the dioceses owing to the scattered

condition of the Catholic population have very few schools. The diocese of Cheyenne, for example, with a Catholic population of 19,000, 18 churches and resident priests, and 27 mission churches has only 2 parish schools. The diocese of Baker City, with a Catholic population of 7,359, 22 churches and resident priests, and 26 mission churches, has only 6 schools. Ten dioceses have each less than 10 schools; 22 have each less than 20. The number, therefore, of those having some form of school supervision among the dioceses with a considerable school enrollment is proportionately very high.

There has been a notable increase in the number of supervisory officers for the parish school systems. Former reports have mentioned the steady increase in the ranks of diocesan superintendents, but there have been no published accounts of the increasing number of community inspectors who are to-day the most important auxiliaries of the diocesan superintendents. These inspectors are members of the teaching communities appointed to supervise the schools of their respective communities. While many of them cover a wide territory in their work of inspection, many others are limited to the schools of their community situated in a diocese. All of the large communities engaged in elementary school work have their inspectors. In recent years it has become a matter of diocesan organization to have local or diocesan inspectors for each diocese. These latter usually constitute a board of inspectors under the chairmanship of the diocesan superintendent and cooperate with the latter official in the supervisory work of the diocese. An idea of their number may be had from the lists published in the reports of the superintendents. In Philadelphia, for example, there were 15 of these inspectors in 1917-18, and in New York, 17. The diocese of Hartford had three inspectors for one teaching community. The results of the community inspector's efforts have been so gratifying that it is safe to predict that their appointment will become a universal practice in the Catholic system before many years.

HIGH SCHOOLS.

No other department in the Catholic school system has attracted more general attention in the past decade than the secondary. A marked activity has set in in the various teaching communities to meet the increasing need for high schools created both by the rapidly growing parish-school system on the one hand and the colleges on the other. The entrance into the field of the parish high school and the central high school, the latter for the accommodation of the children of a larger section or of a group of parishes, has had a pronounced effect on the movement.

The proceedings of the Catholic Educational Association for the past 10 years bear witness to the interest manifested in the move-

ment by Catholic educators and their concern for its proper control and direction. Two important reports (1912 and 1915) have been submitted to the association by the committee on secondary education appointed to study the movement. The later (1915) showed that there were 1,276 Catholic secondary schools in the United States. Of these 473 were for boys and girls; 125 were exclusively for boys; 577 were exclusively for girls; 100 were connected with colleges. They enrolled in the year reported a total of 74,538 pupils, 34,798 of whom were boys and 39,740 were girls. A more detailed study of the high schools containing boys showed that of the 438 schools investigated, all but 29 were directly connected with one or more parish schools. This was not found to be true of the high schools for girls. Of the 577 schools listed only 165 had any parish connections, the majority being academies conducted independently of the parish schools by the teaching communities.

Abundant evidence shows that the high-school movement is spreading rapidly. A comparison of the two reports mentioned above indicates this. As compared with the 1912 figures of 310 high schools containing boys, the 1915 report designates 599—a very substantial increase. Many other indications point to their annual increase in number and efficiency.

Since the year 1912 the Catholic University of America, Washington, D. C., has undertaken to affiliate Catholic high schools which are able to meet certain standard requirements in teaching staff, equipment, and courses of study. This movement has spread every year and in 1918 the list of affiliated high schools contained 144 institutions distributed according to States as follows: Alabama, 2; Colorado, 2; Connecticut, 3; District of Columbia, 1; Florida, 3; Georgia, 2; Illinois, 5; Indiana, 3; Iowa, 11; Kansas, 3; Kentucky, 5; Louisiana, 1; Maryland, 1; Massachusetts, 5; Michigan, 2; Minnesota, 4; Missouri, 9; Nebraska, 2; New Jersey, 1; New York, 3; Ohio, 22; Oklahoma, 3; Oregon, 2; Pennsylvania, 22; South Dakota, 1; Tennessee, 2; Texas, 15; Virginia, 1; Washington, 2; Wisconsin, 6. Annual examinations are set for all affiliated high schools by the university, the pupils receiving their credits on the basis of their standing in them.

COLLEGES.

Institutions listed as colleges for men in the Official Catholic Directory for 1918 number 217, or one more than for the preceding year. As may be seen from the statistics of enrollment to be found in Volume II of the Report of the United States Commissioner of Education not all of these institutions have students of college grade. Ten years ago (1908) a report on Catholic colleges for men was submitted to the Catholic Educational Association which showed that in

a list of 116 there were 16 institutions which had no students above the high school. There has undoubtedly been an increase in the number of Catholic colleges in recent years. The total in the directory, however, must include other institutions besides colleges. A list supplied by the Catholic Educational Association for this report contains a total of 176 colleges, of which 35 are women's colleges. Almost all of these institutions are members of the college department of the Catholic Educational Association.

Most of the colleges for men and all of those for women are conducted by the teaching orders and communities. About 14 colleges, like Mount St. Mary's, Emmetsburg, Md., one of the oldest Catholic institutions in the United States, are conducted by members of the secular clergy. Some of them, however, properly belong to the group of preparatory seminaries.

PREPARATORY SEMINARIES.

The preparatory seminary is really a college open to aspirants to the priesthood whose courses prepare for entrance into the larger or theological seminary. Frequently it bears the name "cathedral college," as in New York City and Chicago, where the institution is conducted by archdiocesan authority and is open to students from the archdiocese who aspire to enter the secular priesthood. Its course is chiefly classical and extends over five or six years. Occasionally this institution is to be found in a diocese which has no theological seminary of its own, as, for example, the diocese of Hartford. Again it forms the classical department of the larger seminary as in Milwaukee and San Francisco and is not distinguished as a separate institution. In the United States there are 15 preparatory seminaries for the secular clergy situated in the archdioceses of Chicago, Milwaukee, Philadelphia, New Orleans, New York, St. Louis, and in the dioceses of Brooklyn, Cleveland, Detroit, Galveston, Hartford, Little Rock, Omaha, Rochester, and San Antonio.

The preparatory seminaries are, as a rule, diocesan institutions, and are taught by the members of the secular clergy. St. Charles' College, Catonsville, Md., has the same educational purpose as the preparatory seminary but is not diocesan in its organization or control. It is conducted by the Fathers of St. Sulpice and is the classical department of St. Mary's Theological Seminary, Baltimore, Md.

THEOLOGICAL SEMINARIES.

The theological seminary offers, as a rule, two years of philosophy and four years of theology. This institution is the lineal descendant of the old episcopal or cathedral school which goes back to the early days of Christianity as the first school for the training of the clergy.

It was revived by the Council of Trent in the sixteenth century and made obligatory throughout the Catholic world. In this country there are 23 institutions of this kind, situated in the archdioceses of Baltimore, Boston, Cincinnati, Milwaukee, New York, Philadelphia, St. Louis, St. Paul, San Francisco; and in the dioceses of Altoona, Brooklyn, Buffalo, Cleveland, Columbus, Denver, Detroit, Galveston, Indianapolis, Little Rock, Newark, and Rochester.

With the exception of three all of the theological seminaries are conducted by the members of the secular priesthood drawn for the most part from the clergy of the diocese. The largest theological seminary in the United States—St. Mary's Seminary, Baltimore, Md.—is under the charge of the Fathers of the Society of St. Sulpice, a community of secular priests having for its purpose the education of the secular clergy. They also conduct St. Patrick's Seminary, Menlo Park, Cal. At Baltimore 330 students were enrolled in 1917-18. These came from all parts of the United States.

SEMINARIES OF RELIGIOUS ORDERS.

The Official Catholic Directory enumerates 106 seminaries for the year 1917-18. The preparatory and theological seminaries number 38; the remaining 68 seminaries are the training schools of the religious orders of men. Intended for the recruits of the respective orders or communities they are conducted by the religious organizations themselves and present certain distinguishing characteristics owing to the peculiar constitution or function of the organization they serve. The Jesuits, for example, have their novitiates and scholasticates; the Congregation of the Holy Cross has its novitiates and seminaries; the Marists have their seminaries and colleges. All the orders, however, whose members become priests, give the candidates for admission to their ranks a course having this at least in common that it embraces the classical or college courses, philosophy, and theology. In a certain sense their institutions correspond to the preparatory and theological seminaries intended for recruiting the secular clergy.

UNIVERSITIES.

A total of 22 Catholic institutions in the United States are designated in the Official Catholic Directory as universities. These institutions are for the most part conducted by the religious orders and congregations. The Society of Jesus, or Jesuits, conducts 12, viz, the University of Detroit, Detroit, Mich.; St. Mary's University, Galveston, Tex.; Creighton University, Omaha, Nebr.; Gonzaga University, Spokane, Wash.; Georgetown University, Washington, D. C.; Loyola University, Chicago, Ill.; Marquette University, Mil-

waukee, Wis.; Loyola University, New Orleans, La.; Fordham University, New York, N. Y.; St. Louis University, St. Louis, Mo.; St. Ignatius University, San Francisco, Cal.; University of Santa Clara, Santa Clara, Cal. The Vincentians, or Fathers of the Congregation of the Mission, operate three, viz, Niagara University, Niagara Falls, N. Y.; De Paul University, Chicago, Ill.; and the University of Dallas, Dallas, Tex. The Benedictines conduct two, viz, the Catholic University of Oklahoma, Shawnee, Okla., and St. John's University, Collegeville, Minn. The Holy Cross Fathers conduct two, viz, Notre Dame University, Notre Dame, Ind., and Columbia University, Portland, Oreg. The Fathers of the Holy Ghost conduct Duquesne University, Pittsburgh, Pa. St. Mary's University, Baltimore, Md., is conducted by the Sulpician Fathers. The Catholic University of America, Washington, D. C., founded by Pope Leo XIII, and ranking as a pontifical university, is conducted by the Catholic hierarchy of the United States.

Detailed statistics in regard to faculties, departments, enrollment of students, etc., may be found in Volume II of this document.

NOVITIATES AND NORMAL SCHOOLS.

The novitiate or training school for the members of a religious community has already been mentioned in connection with the seminaries of the religious orders. As this institution is common to all religious congregations, those of priests and brothers, as well as those of sisters, it needs to be noted again as perhaps the most common type among the schools of a special or vocational character. The brothers of the Christian Schools (Christian Brothers), for example, in each of their four provinces for the United States have a school of this kind, called in one instance, Ammendale Normal Institute (Ammendale, Md.) for the province of Baltimore; and in another, St. Joseph's Normal College (Pocantico Hills, N. Y.) for the province of New York. The Brothers of Mary, another teaching community, has its novitiate in Mount St. John, Dayton, Ohio, and a scholasticate in Mount St. John Normal School, also in Dayton.

The novitiate gives that training required by the community to fit its members for the religious life. In the case of teaching communities, however, additional training is provided for the preparation of the teacher. This holds both for the communities of men such as the brotherhoods, and the communities of women such as the sisterhoods. The course closely corresponds to that of the normal school. Lest the impression be had that this school is of recent origin, or that the practice of giving a normal course to Catholic teachers is new in this country, it may be observed that the maintenance of such a school has been a matter of obligation in all teaching communities since the Third Plenary Council of Baltimore held in 1884.

In addition to the normal-school course given before the novice enters upon his teaching career, a number of communities conduct summer schools and institutes in the novitiates for the improvement of teachers in the service. The summer-school courses usually continue for five and six weeks.

Catholic universities have in recent years offered summer courses to teachers and these have been largely attended by the religious. In 1918 such summer sessions were held at Creighton University, Marquette University, Notre Dame University, and the Catholic University of America. It may be of interest to note that in the latter institution the summer session is conducted under the auspices of the Catholic Sisters College; it is open only to religious and lay women and is chiefly attended by the former.

Normal schools for lay women are also found in the Catholic system. Conspicuous examples are the Academy and Normal School of the Holy Names of Jesus and Mary, Seattle, Wash., and Holy Names Academy and Normal School, Spokane, Wash., conducted by the Sisters of the Holy Names; St. Catherine's Normal Institute, Baltimore, Md., conducted by the Sisters of the Holy Cross, and the Catholic Normal School, Milwaukee, Wis., which had a faculty of six priests and three laymen in 1917-18. As these institutions are at present classified with the academies and colleges it is impossible to designate their exact number.

SCHOOLS FOR INDIANS.

Catholic schools for the education of Indian children numbered in 1917-18, 63. They include 8 day and 55 boarding schools, and in many instances offer industrial and agricultural training. Of the boarding schools, 3, located in Alaska, receive some support from public funds, in the form of salaries paid certain of their teachers. Of the remaining boarding schools, 14 are partly supported, not out of public funds, but out of Indian tribal funds. The balance of these schools (38) are entirely supported by the church, as is the case with all the day schools.

SCHOOLS FOR NEGROES.

Catholic schools for Negroes include parish establishments, agricultural and industrial schools and some colleges. They represented a total of 132 in 1917-18. These schools are supported by endowments and by the voluntary offerings of Catholics collected and distributed through the Catholic Board for Mission Work among the Colored People, and the Commission for Catholic Missions among the Colored People and Indians.

SCHOOLS FOR ORPHANS.

Another class of schools of a special character, comprising a considerable number of educational establishments in the United States, are the schools for orphans. Only 11 of the dioceses of the country were without orphan asylums in 1917-18. Two dioceses, viz, Philadelphia and Newark, had as many as 15 each. In all the dioceses there were 297 orphan schools, accommodating 46,474 children. This total, taken from the Official Catholic Directory, includes the reformatories.

A notable feature of the education of the orphan for many years has been the industrial training, the aim of the Catholic authorities having been to send the young man or woman into the world at the completion of his training as a self-supporting and industrious member of the community. A similar purpose has actuated those charged with the work of reforming the wayward; many of these protectories being now in fact as well as in name industrial schools of a high degree of efficiency.

Among other schools of a special character which are annually increasing in number are those for the deaf and dumb, for the blind, for the feeble-minded, for most of which no general statistics are available. The schools for the deaf and dumb now number 12.



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DEPARTMENT OF THE INTERIOR
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OF CURRENT EDUCATIONAL
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CONTENTS.—Proceedings of associations—Current educational conditions—Education and the war—Educational theory and practice—Educational psychology; Child study—Educational tests and measurements—Special methods of instruction—Special subjects of curriculum—Kindergarten and primary school—Rural education—Secondary education—Teachers: Training and professional status—Higher education—School administration—School management—School architecture—School hygiene and sanitation—Physical training—Social aspects of education—Child welfare—Moral education—Religious education—Manual and vocational training—Vocational guidance—Agricultural education—Commercial education—Civic education—Americanization of immigrants—Military training—Reeducation of war invalids—Education of soldiers—Education of deaf—Exceptional children—Libraries and reading—Bureau of Education: Recent publications—New periodicals.

NOTE.

The record comprises a general survey in bibliographic form of current educational literature, domestic and foreign, received during the monthly period preceding the date of its publication.

This office can not supply the publications listed in this bulletin, other than those expressly designated as publications of the Bureau of Education. Books, pamphlets, and periodicals here mentioned may ordinarily be obtained from their respective publishers, either directly or through a dealer, or, in the case of an association publication, from the secretary of the issuing organization. Many of them are available for consultation in various public and institutional libraries.

Publications intended for inclusion in this record should be sent to the library of the Bureau of Education, Washington, D. C.

PROCEEDINGS OF ASSOCIATIONS.

1. **National education association.** Journal of proceedings of the fifty-sixth annual meeting . . . Pittsburgh, Pa., June 29-July 6, 1918. Journal of the National education association, 3: 151-222, November 1918.

Department of School Administration.—Contains: 1. J. G. Becht: Americanization as a war-time duty of the schools, p. 151-52. 2. E. L. Taylor: School finances as a war-time problem, p. 152-55. 3. James Stover: Uniformity in school accounting, p. 157-62. 4. G. W. Gerwig: War policies for schools, p. 163-65.

Department of Normal Schools.—5. L. D. Coffman: Training for national service in normal schools, p. 166-69. 6. J. A. H. Keith: Report of committee on federal aid and the training of teachers, p. 171-74. 7. W. S. Small: The state normal

schools and the problems of child health, p. 174-76. 8. A. E. Winship: Prepare rather than train for teaching, p. 179-83. 9. J. A. Pitman: Maintaining an adequate supply of teachers without lowering standards, p. 183-85.

Department of Kindergarten Education.—10. Ella A. Merritt: What the government is doing to conserve child life, p. 188-91.

Department of Vocational Education and Practical Arts.—11. Frank Duffy: The reeducation of our returning disabled soldiers after the war, p. 194-95. 12. Mary S. Woolman: The influence of war conditions on vocational education for girls, p. 199-201. 13. A. E. Holder: Education is preparation for life, p. 204-6.

Department of Child Hygiene.—14. J. M. Tyler: What teachers ought to know about the physical growth of children, p. 207-10. 15. G. W. A. Luckey: The mental development of children, p. 210-13. 16. W. H. Burnham: Mental hygiene, p. 213-16. 17. G. S. Hall: A general survey of child-study, p. 216-19. 18. Earl Barnes: Children's sense of time, p. 219-22.

CURRENT EDUCATIONAL CONDITIONS.

GENERAL AND UNITED STATES.

2. **General education board.** The Handley fund, Winchester, Va. A report to the board of Handley trustees. New York, General education board, 1918. 77 p. illus. 12°.

CONTENTS.—Preface.—I. Winchester: Its people and industries.—II. The schools of Winchester.—III. Needs of the Winchester schools.—IV. Use of the Handley fund.—V. Appendix.

3. **Harris, T. H.** Louisiana's educational progress. School and society, 9: 63-65, January 11, 1919.

Gives the contents of a letter sent to the school officials of Louisiana on November 26, directing their attention to the significance of the passage of the educational amendments to the constitution, at the November elections.

4. **Keith, John A. H.** Brief of argument in favor of Senate bill 4987, 65th Congress, second session. Journal of education, 89: 5-7, January 2, 1919.

Also separately reprinted.

Gives arguments in favor of the bill to create a Department of education.

5. **South Carolina.** State council of defense. Does it pay? [Columbia, S. C., 1918] 45 p. 8°.

The money value of education, with special reference to the situation in South Carolina.

6. **Wenley, R. M.** Reckless tenants. Educational review, 57: 22-42, January 1919.

Phi Beta Kappa address at the University of Michigan, May, 1918. Dwells on the poverty of the present time as regards profound thinking; the pursuit of pseudo-knowledge accumulating "odds and ends of information with a view to immediate material gain."

7. **Wilson, W. O.** The Arkansas education commission. Arkansas teacher, 7: 16-20, January 1919.

A résumé of the work of the Arkansas educational commission and what it accomplished for education in Arkansas.

8. **Winsip, A. E.** Educational preparedness. Journal of education, 88: 619-23, December 19, 1918.

Says the World war has revealed unpreparedness in the health of the people, in universal literacy, and in general industrial handiness of all the people. The new demands require intense public devotion to education, supreme wisdom in school administration, unalloyed patriotism in teachers, and joyful financial support by the taxpayers.

FOREIGN COUNTRIES.

9. **Booth, T. K. M., and Usherwood, T. S.** Educational reconstruction and the curriculum. Journal of education and School world (London) 51: 33-35, January 1919.

10. **Clarke, Joseph I. C.** Japan's educational furore. *In his Japan at first hand.* New York, Dodd, Mead and company, 1918. p. 47-58, chapter 5.
11. The educational position. *Educational record* (London) 19: 443-71, November 1918.
Discusses the educational situation in England, the Fisher bill, etc.
12. **Ferrière, A.** The New schools in Europe. *Pedagogical seminary*, 25: 397-406, December 1918.
Physical, intellectual, and moral education in the New schools of Europe.
13. **Lapie, Paul.** Un regard sur l'école d'après guerre. *Revue pédagogique*, 73: 157-78, September 1918.
Writer considers most important the economic aspect of the pedagogical problem for the after-war period. Pupils of the French schools must be trained as producers to double the efficiency of their predecessors.
14. **Pérez-Verdía, Benito Javier.** Public instruction in Guatemala. *Bulletin of the Pan-American union*, 47: 722-29, November 1918. illus.
15. Soviet Russia: orders of the People's commissioner of education of the western provinces and fronts. *Nation*, 107: 829, December 28, 1918.
Taken from decrees and official documents of the Soviet government.
16. **Strunsky, Manya Gordon.** Education and self-government in Russia. *Harper's magazine*, 138: 270-77, January 1919.
Asserts that popular illiteracy is not the cause of the present social and political disorders in Russia. The actual percentage of illiteracy among the Russian people is probably overrated in currently accepted statistics. The Russians have certain qualities which fit them for self-government.

EDUCATION AND THE WAR.

17. **Butler, Nicholas M.** Education after the war. *Educational review*, 57: 64-79, January 1919.
Also in *Popular educator*, 36: 250-53, 293, 295, January 1919.
Addresses before the Association of colleges and preparatory schools of the middle States and Maryland, Princeton, N. J., Nov. 29, 1918.
Criticises the false psychology and crude economics of the pre-war period—a psychology without a soul and an economics with no vision beyond material gain. Stresses moral values in education.
18. **Cary, C. P.** Educational reconstruction. *Educational news bulletin*, 10: 1-3, December 1, 1918.
Says that educational reconstruction will no doubt be largely in the nature of changed emphasis, due to a change in public opinion (or at least professional opinion) with respect to educational values. Thinks that probably the most notable change in the public mind with respect to values is in relation to health and physical vigor.
19. **Chubb, Percival.** Phases of reconstruction: the outlook for education. *Standard* (New York) 5: 92-96, January 1919.
20. Educational lessons from the war—a symposium. *High school quarterly*, 7: 72-83, January 1919.
Contributed by C. A. Prosser, S. P. Capen, P. C. Harris, H. A. Hollister, T. S. Baker, R. Bingham, S. H. Edmunds, Harry Howell, T. H. Briggs, J. D. Eddy, A. M. Soule, H. B. Moore, R. E. Blackwell, C. B. Gibson, D. C. Barrow, Wilson Farland, G. E. Vincent.
21. **Eliot, Charles W.** Defects in American education revealed by the war. *School and society*, 9: 1-10, January 4, 1919.
An address given in Carnegie hall, New York, November 23, 1918.

22. Ellis, A. Caswell. Educational preparedness for after the war. In National institute of social sciences. Journal, vol. 4, 1918. Reconstruction after the war. Boston, Boston book company, 1918. p. 129-36.
Cites a number of post-war demands on the schools.
23. Friend, L. L. The high schools after the war. High school quarterly, 7: 83-87, January 1919.
Defects in the public schools which have been brought to light by the war and suggestions for educational reconstruction in the future.
24. Hunt, Everett Lee. Creative teaching in war time. Quarterly journal of speech education, 4: 386-97, October 1918.
Speaks of the S. A. T. C. and the necessity, owing to the limited time, of teachers creating interests which will be pursued in aftertimes.
25. Jeffords, Clyde B. The war and education. School, 30: 195, January 9, 1919.
The effect of the war on secondary education.
26. Problems of reconstruction; lectures and addresses delivered at the summer meeting at the Hampstead garden suburb, August 1917. London, T. Fisher Unwin, ltd. [1918] 315p. 12°.

CONTENTS.—Introduction, by the Marquess of Crewe. Pt. I.—First principles of reconstruction. Pt. II.—Reconstruction in education.—1. Education from the child's point of view, by John Adams; 2. The education of the girl for national service and civic responsibility, by Sarah Burstall; 3. The liberty of the child in education, by Dr. Kimmins; 4. The influence of vocation on school education, by Guy Kendall. Pt. III.—Social and industrial reconstruction. Pt. IV.—Arts and crafts in relation to reconstruction (including Art schools and craft workshops, by Selwyn Image and Thomas Okey).
27. West, Andrew F. Education after the war. Princeton alumni weekly, 19: 259-60, January 8, 1919.
An address before the annual conference of the regents of the state of New York, held at Albany, December 12, 1918.
Shows the necessity for general education along with vocational training.
28. Winship, A. E. War-modified education in the United States. Journal of education, 88: 649-50, December 26, 1918.

EDUCATIONAL THEORY AND PRACTICE.

29. Bardeen, C. W. The man milliner in education. Educational review, 57: 5-21, January 1919.
The writer begins by declaring that the foundation stone of millinery is change, constant and rapid change of styles. "There is," he says, "a good deal of the millinery idea in education." He sketches in amusing manner the various changes in pedagogy, dwelling particularly on the methods of teaching arithmetic.
30. Davis, Sheldon Emmor. The work of the teacher. New York, The Macmillan company, 1918. xv, 342p. tables, diagrams. 12°.
31. Johnston, J. B. The public education of youth; the place of creative work and of subject-matter studies. School and society, 9: 69-79, January 18, 1919.
32. Stilwell, Katherine M. Making schoolbooks. Elementary school journal, 19: 256-67, December 1918.
Preparing a textbook for publication, seeing it through the press, copyrighting, etc.

EDUCATIONAL PSYCHOLOGY; CHILD STUDY.

33. **Barker, Lewellys F.** The first ten years of the National committee for mental hygiene, with some comments on its future. *Mental hygiene*, 2: 557-81, October 1918.

President's address at the tenth annual meeting of the National committee for mental hygiene held in New York city, February 1918.

34. **Bode, B. H.** What is transfer of training? *School and society*, 9: 39-44, January 11, 1919.
35. **Gray, C. Truman.** Educational psychology. *Psychological bulletin*, 15: 301-11, September 1918.

Reviews the psychological literature of the year that bears on education, and gives numerous references to articles in educational periodicals.

36. **Mateer, Florence.** The diagnostic fallibility of intelligence ratios. *Pedagogical seminary*, 25: 369-92, December 1918.
- Bibliography: p. 891-92.

37. **Mitchell, David.** Child psychology. *Psychological bulletin*, 15: 311-23, September 1918.

A résumé of the literature of child study for the year 1918. Contains list of references to periodicals.

38. **Sala y Cantos, Angela.** Instinto del juego en el niño. Investigaciones realizadas en el niño cubano. *Revista de la facultad de letras y ciencias, Universidad de la Habana*, 27: 27-98, July-October 1918.

Thesis for the degree of doctor of pedagogy in the University of Havana, specially recommended for publication by the examining tribunal.

EDUCATIONAL TESTS AND MEASUREMENTS.

39. **Boston.** Department of educational investigation and measurement. Organization and administration of intermediate schools in Boston. Boston, Printing department, 1918. 75 p. tables. 8°. ([Boston. School committee] School document no. 13-1918. Bulletin no. 17 of the Department of educational investigation and measurement)

40. **Cuneo, Irene, and Ternman, Lewis M.** Stanford-Binet tests of 112 kindergarten children and 77 repeated tests. *Pedagogical seminary*, 25: 414-28, December 1918.

"The purposes of this study were as follows: (1) To find the distribution of intelligence among kindergarten children; (2) to correlate the results of Stanford-Binet tests with school marks and teachers' estimates of intelligence; (3) to determine the effect of the repetition of a test upon the resulting intelligence quotient; and (4) to secure data which would throw light on the proper location of the tests in the scale."

41. **Downey, June E.** Standardized tests and mental inheritance. *Journal of heredity*, 9: 311-14, November 1918.

Very young children already show great variation in special aptitudes, which is probably not to be explained by differences in environment. More tests are needed, according to Dr. Downey.

42. **Duggan, M. L.** Educational survey of Decatur, Georgia, public school system. [Atlanta, Ga., Department of education, 1918] 56 p. 8°. (No. 26)
43. **Gates, Arthur I.** Correlations of immediate and delayed recall. *Journal of educational psychology*, 9: 489-96, November 1918.

"An experimental study of the learning of elementary school pupils in grades III to VIII shows a high correlation between the amount learned in a given time and the amount recalled after a lapse of some hours. In general the rapid learner is the best retainer."

44. **Lange, Alexis F.** An educational research syndicate. *Sierra educational news*, 15: 18-20, January 1919.

45. **Monroe, Walter Scott.** Measuring the results of teaching. Boston, New York [etc.] Houghton Mifflin company [1918] xviii, 297 p. 12°. (River-side textbooks in education, ed. by E. P. Cubberley)
46. **Patterson, T. L.** Pedagogical suggestions from memory tests. *Journal of educational psychology*, 9: 497-510, November 1918.
This paper reports the results of various tests of memory with elementary and secondary pupils, and considers the educational significance of the findings.
47. **Theisen, W. W.** A report on the use of some standard tests for 1918-17. Madison, Wis., 1918. 120 p. 8°. (Wisconsin. State department of public instruction. Studies in educational measurements in Wisconsin. Bulletin no. 1)
48. **Theisen, W. W., and Fleming, Cecile White.** The diagnostic value of the Woody arithmetic scales: a reply. Part I. *Journal of educational psychology*, 9: 475-88, November 1918.
Part II will appear in the December number.
"The charge has been made that the Woody arithmetic scales fail to furnish material for an accurate diagnosis of individual and class differences in arithmetical abilities. The first part of this paper presents a detailed answer to the criticisms that have been made of the scales. The second part will contain constructive suggestions."
49. **Weld county, Colo.** Juvenile department of the county court. The farm and the school. A résumé of a survey of the public schools of Weld county, Colorado. Greeley, Colo., Extension department of Colorado state teachers college, 1918. 63 p. 8°. (Colorado state teachers college bulletin, ser. 17, no. 6, September 1918)
Pt. I. The survey and its application, by Herbert M. Baker.—Pt. II. Educational interpretation of the survey, by Edgar Dunnington Randolph.—Appendix, Reprint and explanation of forms adopted for the enforcement of the compulsory education law in Weld county, Colorado.
50. **Wilds, Elmer Harrison.** The inspectorial function. *Wisconsin journal of education*, 51: 12-16, January 1919.
The educational survey—how it should be conducted and some of its values.

SPECIAL METHODS OF INSTRUCTION.

51. **Edison, Thomas A.** "One of the greatest things in the world." *Educational film magazine*, 1: 7-8, 26, January 1919.
"The view of educational motion pictures expressed in an exclusive interview with the editor of Educational film magazine, by the greatest inventor in the world."
52. **Knowlton, Daniel C.** Current events through pictures. *Historical outlook*, 10: 24-28, January 1919. Illus.
53. **Owen, William Bishop.** The problem method. *Chicago schools journal*, 1: 3-6, November-December 1918.
54. **Stevenson, John Alford.** The project in science teaching. *School science and mathematics*, 19: 50-63, January 1919.
Also in *School and home education*, 38: 110-14, January 1919.
A paper read before the joint session of science teachers, Illinois high school conference, held at Urbana, November 21-23, 1918.

SPECIAL SUBJECTS OF CURRICULUM.

55. **Almack, John C.** A test in English composition—writing the friendly letter. *Oregon teachers monthly*, 23: 151-56, December 1918.
Says that the Hillegas scale includes artificial compositions. Suggests a scale based on the friendly letter.

56. Cram, Ralph Adams. Education and the qualitative standard. English leaflet, 19:1-7, January 1919.

A plea for the recognition of character-development as the prime object of education, and for the teaching of English after a fashion that will reveal great thoughts through the great art of English literature.

57. Gahrkens, Karl Wilson. Music's place in our public schools. Musical America, 29:9, January 11, 1919.

This is the first of three articles which are to appear in Musical America. Deals with the influence of music in training the mind, music as a socializing force, and music in connection with the worthy use of leisure.

58. Gummere, Richard M. The modern world and the Latin classroom. Nation, 108:13-14, January 4, 1919.

Proposes a scheme which relates classroom work in Latin with the future profession of the student.

59. Kugelmass, I. Newton. The criteria in the declaration of chemical independence in the United States. Science, n. s. 48:608-12, December 20, 1918.

Development of chemistry in the United States. Work of the college and university in this new age of scientific and industrial achievement.

60. McCracken, William. What should a student get from a beginning course in chemistry? School science and mathematics, 19:75-82, January 1919.

Read before the physics and chemistry section of the Michigan schoolmasters club, March 1917.

61. Mercier, Louis J. A. Teaching to speak French in college. Educational review, 57:43-59, January 1919.

Dwells on the psychological aspects of the subject—the establishing of "marginal habits of the Ideo-motor type."

62. Merrill, Helen A. Why students fail in mathematics. Mathematics teacher, 11:45-56, December 1918.

How much of the failure is due to the subject itself, how much to those who teach it, how much to parents and friends of students, and how much to students themselves.

63. Minnick, J. H. Arithmetical errors made by high school pupils. Mathematics teacher, 11:80-89, December 1918.

64. O'Neill, J. M. Aims and standards in speech education. Quarterly journal of speech education, 4:345-65, October 1918.

Delivered at the annual meeting of the Wisconsin state teachers' association, Milwaukee, November 2, 1917.

The need for a reorganization of aims and standards in speech education. Speaks especially of conditions in Wisconsin.

65. Packard, Leonard O. Geography and reconstruction in education. Journal of geography, 18:24-28, January 1919.

66. The proposed classical league. Reasons for forming it. Current education, 23:22, 24-29, January 1919.

A plea for classical education. Gives suggestions showing that the formation of an American classical league is both important and opportune.

67. Boedder, Edwin C. Der gegenwärtige stand des deutschen unterrichts an den colleges und universitäten der Vereinigten Staaten. Monatshefte für deutsche sprache und pädagogik, 19:260-63, December 1918.

68. Shields, Thomas Edward. Music in the elementary school. Catholic educational review, 17:17-27, January 1919.

The place of music in the emotional life of the school. Quotes freely from The melodic method in school music, by David C. Taylor.

69. **Valentine, C. W.** Classics, history, and the training of the reason. *Journal of experimental pedagogy and training college record* (London) 4: 280-89, December 5 1918.
A criticism of humanistic studies. An argument against the compulsory study of Latin and Greek as advocated by Cyril Robinson, of Winchester college, England.
70. **Vestal, C. L.** The new physics. *School science and mathematics*, 19: 66-74, January 1919.
Suggests changes that should be made in the equipment, teaching method, texts, etc., in the teaching of physics.
71. **Webb, Hanor A.** Chemistry, a trade or a profession? [Garrison, N. Y.] The Science press, 1918. p. 530-34. 8°.
Reprinted from the *Scientific monthly*, December, 1918.
The advantages of college training for chemists over experience only.
72. **White, C. E.** Mathematics and anti-mathematics. *School science and mathematics*, 19: 29-37, January 1919.
A defense of mathematics.

KINDERGARTEN AND PRIMARY SCHOOL.

73. **Curtis, Fanniebelle.** Tentative syllabus in kindergarten extension for the elementary schools of the city of New York. *Kindergarten and first grade*, 4: 11-13, January 1919.
74. **Grant, Emma M.** The kindergarten-primary grade. *Primary education*, 27: 6-8, January 1919.
The unification of kindergarten and primary education.
75. **Krackowizer, Alice M.** Projects in the primary grades. A plan of work for the primary grades and the kindergarten. Philadelphia and London, J. B. Lippincott company [1919] 221 p. front., plates. 12°. (Lippincott's school project series, ed. by W. F. Russell)
76. More kindergartens a necessity. *Outlook*, 120: 580-81, December 11, 1918. illus.
The information contained in this article was obtained from Miss Bessie Locke, chief of the kindergarten division of the United States Bureau of education.
77. The relation between initiative and organization. *Kindergarten and first grade*, 4: 4-10, January 1919.
Initiative and organization in the kindergarten. The first article is by Catharine R. Watkins, the second by Caroline D. Aborn, and the third by Grace E. Mix.
A discussion which took place at the meeting of the International kindergarten union in Chicago.
78. **Vinal, William Gould.** First grade readers. *Nature-study review*, 14: 371-79, December 1918.
A survey and criticism of first grade readers showing the nature content of thirty-three of the best and most used first-grade readers.
79. **White, Jessie.** Misconceptions of the Montessori method. *School guardian* (London) 44: 29-31, December 21, 1918.
Says that nothing could be more penetrated by religion than Dr. Montessori's view of life. Deals with the misconceptions that have arisen regarding the Montessori system.

RURAL EDUCATION.

80. **Lewis, Howard.** The rural school and the community; a study of the methods and application of the social survey. Boston, R. G. Badger [1918] 91 p. 12°. (Library of educational methods)
Bibliography: p. 85-88.
81. **Stimson, Rufus W.** Effect of rural continuation school on agricultural efficiency. *American education*, 22: 208-11, January 1919.
Deals particularly with the home project plan of teaching agriculture.

SECONDARY EDUCATION.

82. Andrews, W. E. Correlation in high school science courses. School review, 27: 1-12, January 1919.

Says that the recent vocational pressure has increased "the number of *studies* rather than the number of natural *sciences*". Presents a plan for high school program for year-courses.

83. Cade, George N., and Gray, William S. Objective studies of the achievements of training-school and public-school pupils in the freshman year of the high school. Elementary school journal, 19: 291-310, December 1918.

A study to determine the relative efficiency of teaching in elementary training schools which are connected with normal schools and in elementary public schools.

84. Ferguson, H. O. The high school chorus—its importance and organization. Nebraska teacher, 21: 217-20, January 1919.

Part I appeared in the December issue.

85. Haisley, Otto W. A type of high school administration. American school board journal, 58: 34, 77, January 1919.

Shows how a high school in a small city gets along without a principal by giving the clerical work over to the commercial department to be handled and by putting the disciplinary problems into the hands of the teachers who are appointed as special advisers.

86. Jerusalem, William. Problems of the secondary teacher; authorized translation by Charles F. Sanders. Boston, R. G. Badger [1918] 253 p. 8°. (Library of educational methods)

The translator gives as his reason for offering this book in English dress, "its splendid success in the effort to furnish insight into the problems of the secondary school from the profound viewpoint of the fundamentals of human nature and of human society."

87. Joliet, L. Les deux écoles. Revue universitaire, 27: 235-44, November 1918.

The two schools whose views are discussed in this article are those who hold that secondary education should be open to all pupils wishing it, and those who would admit to secondary institutions only specially qualified candidates.

88. Kuhn, Paul. Les arts mécaniques dans l'enseignement secondaire. Revue universitaire, 27: 245-52, November 1918.

Criticises secondary education in France for hitherto devoting its attention too much to training the intellect alone. Favors recognition of the manual arts by the new education which is to follow the war.

89. Lull, Herbert G. Administration of junior and senior high school curricula. American schoolmaster, 11: 440-46, December 15, 1918.

Examples.—Junior and senior training high schools, Kansas state normal, Emporia.

90. Morrison, Henry C. The supervision of high school teaching. School review, 27: 13-23, January 1919.

Emphasizes the importance of "technique." Says that technique comes through observing technique in others and practicing it under the observation of those who possess it.

91. Patterson, Herbert. The high-school curriculum: a statistical study of accredited four-year high schools in South Dakota. School and society, 8: 776-80, December 28, 1918.

This study shows what is actually being taught in our high schools at the present time and notes the emphasis given to the different subjects.

92. Borem, S. O. Measuring East junior high school of Sioux City, Iowa. School review, 27: 44-55, January 1919.
Deals with entrance requirements, housing, kinds of courses, departmentalized instruction, preparation of teachers, the student advisory system, supervised study, etc.
93. White, Robert J. Cost of high-school instruction in Washington. American school board journal, 58: 25-26, 78, January 1919.
94. Wilcox, George M. Cost of high school instruction. Method of computing cost of instruction and its application to thirty high schools in South Dakota and to three high schools in Des Moines. Educational administration and supervision, 4: 445-66, November 1918.
Bibliography on cost in relation to education, p. 464-66.
95. Yoder, C. M. "The funds of high school organizations." Wisconsin journal of education, 51: 16-20, January 1919.
Suggests plan and forms for caring for the finances of high school organizations.

TEACHERS: TRAINING AND PROFESSIONAL STATUS.

96. Aretz, C. W. A point scale method for the rating of elementary school teachers. Current education, 23: 8-8, January 1919.
97. Balliet, Thomas M. A critique of normal school curricula. Journal of the New York state teachers' association, 5: 257-59, November 1918.
Says that normal schools are strong on the practical side of their work and that their weakest point is their academic training.
98. Cattell, J. McKeen. The "policies" of the Carnegie company. School and society, 9: 10-23, January 4, 1919.
Gives extracts from statements from a number of professors showing the widespread discontent with the Carnegie plans for life insurance and annuity policies for teachers, and compares the rates of the Carnegie company with the rates of the two largest American insurance companies.
99. Johnson, Alvin. More educational inquisition. New republic, 17: 305-7, January 11, 1919.
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100. Lull, H. G. The redirection of teacher training in normal schools. Educational administration and supervision, 4: 483-92, November 1918.
101. MacCaughy, Vaughan. The teaching profession in Hawaii. Sierra educational news, 15: 15-17, January 1919.
A brief outline of the important facts concerning teachers and teaching in Hawaii.
102. Madden, Martin B. Pay of teachers. Journal of education, 89: 47, January 9, 1919.
An address by Congressman Madden in Congress when discussing the bill for higher salaries in Washington, D. C.
103. Martin, A. S. Teachers' salary-increase in Pennsylvania paramount to the welfare of the children and the state. American school board journal, 58: 22, 78, January 1919.
Shows the need for a radical readjustment of salaries in Pennsylvania and also for a liberal increase in order that the teachers may live within the profession above the poverty line.

104. **New Jersey. Bureau of state research.** Teachers' retirement systems in New Jersey. Their fallacies and evolution. Parts II and III. Present condition and practical remedies. Newark, Bureau of state research, 1918. p. 53-87. 8°. (State research, section 2, vol. 6, no. 1, October 1918. Consecutive no. 12)

Part I, "Evolution of the systems," was published as Consecutive no. 10.

105. **Wilson, Lester M.** Psychology in teacher training courses. Educational administration and supervision, 4: 467-78, November 1918.

The content, method, etc., of courses in psychology.

106. **Withers, John W.** The training of teachers in service. Elementary school journal, 19: 268-78, December 1918.

Second article of series. Delivered on July 17, 1918, as one of a series of lectures given during Superintendents' week, at the University of Chicago. Urges the cultivation of more intimate relations between institutions of higher education and city systems.

107. **Wright, John D.** Normal training of teachers. Volta review, 20: 727-29, December 1918.

Training of teachers of the deaf. Discusses qualifications of candidates.

HIGHER EDUCATION.

108. **Boas, Franz.** Freedom to teach. Nation, 108: 88-89, January 18, 1919.

Writer thinks that university faculties should not be closed corporations, and that university research and instruction should not be monopolized by the appointees of university boards of trustees. He advocates a system which will give properly qualified volunteer instructors an opportunity to teach.

109. **Bolton, Frederick E.** What should constitute the curriculum of the junior college or extended high school? School and society, 8: 726-30, December 21, 1918.

110. **Heckel, Albert Kerr.** The war aims course in the colleges. Historical outlook, 10: 20-22, January 1919.

111. **Le Boutillier, Philip.** The Princeton A. B. degree. Princeton alumni weekly, 19: 260-61, 278-79, January 8, 15, 1919.

Deals with the proposed readjustment of the A. B. curriculum, and the position of Princeton as regards classical education, the effect her championship of it had on pre-war development and the probable effect of it on her post-war development.

112. **Milburn, J. B.** The University of Louvain. Catholic educational review, 17: 3-16, January 1919.

A brief history of the University of Louvain and its library, which were reduced to ruins and ashes in 48 hours by the Germans.

This article was written in May 1915, "but the whole world was so absorbed in the struggle then going on and in the rapid succession of the terrible events of the war that it was deemed wiser to hold it for calmer times."

113. **National scholarships.** New republic, 17: 329-30, January 18, 1919.

An editorial advocating a system of national scholarships for selecting from the common schools, and training for national service, a sufficient number of young men.

114. **Schurman, Jacob G.** Twenty-sixth annual report by President Schurman, 1917-1918. Ithaca, N. Y., Cornell university, 1918. 63, cxlii p. 8°.

Among the topics treated in this report the following seem worthy of special mention: Compulsory and free study, The university and democracy, The humanities and humanity, The cultivation of science, Federal subventions for research, The crisis in medical education.

115. **Shipley, Arthur Everett.** An English university in war time. *Outlook*, 121: 62-63, January 8, 1919.

Writer is master of Christ's college, Cambridge.

116. **Smith, Henry Louis.** "Working one's way" through college. *Lexington, Va., Washington and Lee university*, 1918. 16 p. 12°. (*Washington and Lee university bulletin*, vol. 17, no. 19, December 15, 1918).

For the guidance and encouragement of young men who are richer in brains, energy, and character than in available cash.

117. **Southern association of college women.** Bulletin for the joint committee of the Association of colleges and secondary schools of the Southern states and the Southern association of college women to secure legislation restricting the granting of charters with degree-conferring privileges. Pub. by the Southern association of college women, 1918. 31 p. 8°.

118. **Stokes, Anson Phelps.** University reorganization problems and policies. *Yale alumni weekly*, 28: 429-35, January 17, 1919.

Abstract of address at a New York Yale club mass meeting January 13, 1919.

SCHOOL ADMINISTRATION.

119. **National association of school accounting and business officials of public schools.** Report of the 7th annual meeting, May 21, 22, and 23, 1918. Rochester, N. Y. 79 p. 8°. (E. C. Baldwin, secretary, Boston, Mass.)

Contains: 1. William Dick: School administration, p. 7-13. 2. Arthur Kliskade: Efficiency in school business management, p. 13-23. 3. L. C. Powers: Uniformity in the classification of school expenditures, p. 24-30. 4. E. M. Brown: Purchase of supplies and award of contracts, p. 30-35. 5. H. R. Bonner: Collecting and compiling high school statistics, p. 36-37. 6. G. W. Gerwig: The high cost of ignorance, p. 39-43. 7. J. D. McCollister: The secretary in the small city—his relations to the school board, the employees and the citizens, p. 43-46. 8. H. L. Patterson: Economy in schoolhouse construction, p. 46a-46f. 9. G. F. Womrath: Ventilation of school rooms and systems in use, p. 47-62. 10. E. H. Thomas: Fire insurance, p. 62-70.

120. **Espenschied, F.** Helpful supervision. *Ohio educational monthly*, 68: 15-18, January 1919.

A few suggestions that will aid superintendents to make their work more helpful to the teachers.

121. **Jernegan, Marcus W.** Compulsory education in the American colonies. *School review*, 27: 24-43, January 1919.

Continued from December number. Resumes consideration of compulsory education in New England colonies.

122. **Mirick, George A.** Administration and supervision. *Elementary school journal*, 19: 285-90, December 1918.

Says that the time has arrived "in the evolution of education when administration and supervision of instruction should be entirely separated from the kindergarten through the high school."

123. **Weeks, Arland D.** Apportionment of state school funds. *Quarterly journal of the University of North Dakota*, 9: 122-28, January 1919.

124. **Wiener, William.** Record control. *American school board journal*, 58: 43-45, January 1919.

Gives samples of a number of record forms used by the Central commercial and manual training high school of Newark, N. J.

SCHOOL MANAGEMENT.

125. **Bonser, Frederick G.** School work and spare time. Cleveland, O., *The Survey committee of the Cleveland foundation*, 1918. 176 p. 12°. ([Cleveland foundation. Publications] 28)

One of the seven sections of the report of the Recreation survey of Cleveland conducted by the Survey committee of the Cleveland foundation in 1917.

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127. **Lappin, John C.** Supervised study. Ohio educational monthly, 68: 3-7, January 1919.
To be concluded next month.
128. **Linscheid, A.** Supervised study. Oklahoma school herald, 26: 333-36, December 1918.
Bibliography: p. 336.
129. **Maxwell, C. B.** The selection of text-books. School and society, 9: 44-52, January 11, 1919.
Deals with the prevailing standards of selection and justifiable standards for selections.
130. **Beavis, W. C.** The duties of the supervising principal. Elementary school journal, 19: 279-84, December 1918.
Declares the purpose of the article to be a presentation of the duties of the supervising principal in their entirety, rather than a consideration of the merits or demerits of the different types of principal.
131. **Sumner, S. Clayton.** Supervised study in mathematics. Journal of the New York state teachers' association, 5: 270-75, November 1918.

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132. **Challman, S. A.** What type of high school building is the best all-around investment? American school board journal, 57: 45, 73, 75; 58: 28-29, 78, December 1918, January 1919.
Part I: The home desk study room type. Part II: The combined study and recitation room type.

SCHOOL HYGIENE AND SANITATION.

133. **Brincker, J. H.** Laboratory methods in school hygiene. School hygiene (London), 9: 51-60, November 1918.
Also in American journal of school hygiene, 2: 142-61, December 1918.
134. **Holder, Arthur E.** What is the relation of wages to public health? American journal of public health, 8: 888-94, December 1918.
An interesting study by a member of the Federal board for vocational education. Emphasizes health inspections in public schools, etc.
135. **Priestley, John.** The benefits of medical inspection. School hygiene (London), 9: 46-50, November 1918.

PHYSICAL TRAINING.

136. **Benson, Ruth.** Value of physical training. South Dakota educator, 32: 14-15, January 1919.
137. **Stecher, William A.** Lessons from the first draft for soldiers under the selective service act. Mind and body, 25: 321-29, December 1918.
The need for definite vigorous physical activity as shown in the results from the draft, and what the schools are going to do to decrease the amount of physical unfitness. Speaks particularly of conditions in Philadelphia.
138. **Walsh, James J.** Abuses in college athletics. America, 20: 360-62, January 18, 1919.
Speaks of some of the unfortunate tendencies that in recent years have been so much in evidence in college athletics.

SOCIAL ASPECTS OF EDUCATION.

139. **Holmes, Henry W.** Scouting and the schools. Educational standards, 7: 41-44, December 1918.
Speaks particularly of the cooperation which should exist between the scouts and the schools.

140. The training school of psychiatric social work at Smith College. *Mental hygiene*, 2: 582-94, October 1918.
 A symposium, as follows: (1) Educational significance of the course, by W. A. Neilson. (2) A lay reaction to psychiatry, by E. M. Southard. (3) The course in social psychiatry, by Edith R. Spaulding. (4) A scientific basis for training social workers, by F. S. Chapin. (5) An emergency course in a new branch of social work, by Mary C. Jarrett.
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142. National child labor committee. Fourteenth annual report. . . . Child labor bulletin, 7: 149-223, November 1918.
 Contains: 1. Ruth McIntire: American children and the war, p. 178-84. 2. Lucile Eaves: War-time child labor in Boston, p. 185-97. 3. R. G. Fuller: A national children's policy, p. 198-206. 4. R. G. Fuller: A quest of constitutionality, p. 207-14. 5. G. P. Barth: Why have health supervision of the working child? p. 215-17.
143. Slingerland, William H. Child placing in families; a manual for students and social workers. New York, Russell Sage foundation, 1919. 261 p. plates. 8°.

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144. McCormack, T. J. Morality code for the young. School and home education, 38: 103-9, January 1919.
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RELIGIOUS EDUCATION.

145. Cope, Henry F. Democratic training through the church. *Religious education*, 13: 401-11, December 1918.
146. Drake, Durant. Religious education after the war. *Religious education*, 13: 387-97, December 1918.
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147. Weigle, Luther Allan. The effect of the war upon religious education. *In Religion and the war*; by members of the faculty of the School of religion, Yale university; ed. by E. Hershey Sneath. New Haven, Yale university press, 1918. p. 105-21.
 Says that religious education after the war will be more democratic, more immediately concerned with life, more fully Christian.

MANUAL AND VOCATIONAL TRAINING.

148. Bennett, Charles A. Wanted: a national school of industrial art. *American magazine of art*, 10: 85-88, January 1919.
 Outlines a scheme for an advanced school of industrial arts which would be for the art industries what post-graduate courses in the universities are to the professions.
149. Cummings, John. The new apprenticeship. *Vocational summary*, 1: 10-11, December 1918.
150. Guillet, Léon. L'enseignement technique supérieur à l'après-guerre. Paris, Payot et cie., 1918. 294 p. 12°. (Bibliothèque politique & économique)

151. **Hoyer, John W.** The attitude of organized labor with respect to industrial education. *Manual training magazine*, 20: 162-66, January 1919.
152. **Kelly, F. J.** The general or composite industrial school in the city of less than twenty-five thousand population. *School and society*, 8: 721-26, December 21, 1918.

The function of the composite industrial school, its course of study and the teachers.

153. **Leavitt, Frank M.** Outlining a manual arts course for the first eight grades. *Industrial-arts magazine*, 8: 1-6, January 1919.
154. **Ross, Denman W.** On art education in the public schools. *Educational standards*, 7: 61-67, January 1919.

Putting the teaching of art upon a more scientific basis.

155. **Snedden, David.** Vocational education after the war. *School and society*, 8: 751-58, December 28, 1918.

Notes of an address delivered before the Regents' convocation of the state of New York, December 12, 1918.

156. **U. S. Federal board for vocational education.** Second annual report. 1918. Washington, Government printing office, 1918. 172 p. 8°.

VOCATIONAL GUIDANCE.

157. **Bishop, Avard Longley and Keller, Albert Galloway.** Industry and trade; historical and descriptive account of their development in the United States. Boston, New York [etc.] Ginn and company [1918] 426 p. illus. 12°.

The purpose of this book is to prepare the boys and girls in our schools for efficient citizenship and for material success as well, by teaching them the industrial and commercial situation in our country today. It will be useful in vocational direction work.

158. **Clark, Harry.** Vocational guidance. *High school journal*, 2: 6-8, January 1919.

The value of vocational guidance to the teacher, the employer, the parent, and the student.

159. **Wilson, Ida M.** The employment manager and applied vocational guidance. *Annals of the American academy of political and social science*, 81: 144-47, January 1919.

Says that one should go to living sources for vocational information: to office, factory, and field.

AGRICULTURAL EDUCATION.

160. **Mead, Elwood.** Summary of soldier settlements in English-speaking countries. Washington, Government printing office, 1918. 28 p. 8° (*At head of title:* Department of the Interior. Franklin K. Lane, secretary)

Includes the subject of training the soldiers by agricultural courses and otherwise, for working the lands allotted to them.

COMMERCIAL EDUCATION.

161. **Bishop, Avard L.** A plan for a scientific course in preparation for business. *Yale alumni weekly*, 28: 384-85, January 3, 1919.
162. **Bush, Mrs. Hinton.** The present need of shorthand and typewriting in the high schools. *Mississippi educational advance*, 8: 19-26, November 1918.
163. **Reed, James C.** Practical course in salesmanship and advertising for high schools. *Business educator*, 24: 22-24, January 1919.

CIVIC EDUCATION.

164. **Junior civic and industrial league, Lincoln, Nebr.** *The junior citizen.* An account of the activities of the Junior civic and industrial league, Lincoln, Nebraska, 1917-18. Pub. jointly by the Lincoln commercial club, the Lincoln city government, and the Board of education. [Lincoln 1919?] 47 p. illus. 8°.

AMERICANIZATION OF IMMIGRANTS.

165. **Lape, Esther Everett.** *Americanization in Delaware.* A state policy initiated by the Delaware state council of defense. [Dover, Del., 1918] 48 p. 8°.
166. *National efficiency quarterly*, vol. 1, no. 3, November 1918. (Americanization)
Contains: 1. Sarah Elkus: Education in English language promotes efficiency, p. 140-49. 2. Joseph Mayper: Flag day in America, p. 152-64. 3. Frank Trumbull: The progress of Americanization, p. 179-86. 4. Anne Rhodes: Americanizing an industrial city, p. 186-96. 5. A. J. Beatty: Effective Americanization program, p. 196-203. 6. Beale Locke: The kindergarten a vital Americanizing agency, p. 204-13.
167. **Wilson, H. B.** *The Americanization of education.* *Western journal of education*, 24: 1-2, December 1918.
Extracts from an address delivered before the California schoolmasters' club.
Discusses the establishment of an educational system in the United States which is definitely adapted to serve the present and future needs of our nation; a system adapted to realize our present and gradually evolving ideals; a system adapted to preserve, enlarge, and improve our democratic American institutions.

MILITARY TRAINING.

168. **Chancellor, William Estabrook.** *S. A. T. C. reflections of a college professor.* *Journal of education*, 89: 31-33, January 9, 1919.
169. **Sanford, S. V.** *The S. A. T. C.—a college view.* *High school quarterly*, 7: 95-103, January 1919.
The organization of the S. A. T. C. at the University of Georgia, some of the defects of the system, and lessons to be learned from it.
170. **Stowe, A. Monroe.** *The S. A. T. C. idea, a possible solution of some of the social and military problems of democracy.* *School and society*, 8: 758-62, December 28, 1918.
171. **Thorndike, Edward L.** *Scientific personnel work in the army.* *Science*, n. s. 49: 53-61, January 17, 1919.
172. **Thwing, Charles F.** *The duties of the soldier-student.* *Educational review*, 57: 1-4, January 1919.
Sums up the duties as follows: Obedience; whole-heartedness and enthusiasm; unity of purpose; and patriotism. In other words, "the duty of obedience; the duty of giving your best self to the cause you serve; the duty of remembering that you are a part of a great whole; the duty of love for your country and for the world."

REEDUCATION OF WAR INVALIDS.

173. **Bennett, Helen Christine.** *Helping the wounded to help themselves.* *Pictorial review*, 20: 6-7, 63, February 1919. illus.
Uncle Sam's wonderful reconstruction work, both physical and vocational. Is making our disabled soldiers self-supporting.
174. **Drexel, Constance.** *Rehabilitation and vocational training of war cripples.* *American labor legislation review*, 8: 308-10, December 1918. illus.

175. **Hill, David S.** Valid uses of psychology in the rehabilitation of war victims. *Mental hygiene*, 2: 611-28, October 1918.
An examination of the Canadian system; question of mental tests, etc.

EDUCATION OF SOLDIERS.

176. **Stockbridge, Frank Parker.** The khaki university. *World's work*, 37: 332-39, January 1919. illus.
Fitting our soldiers for civilian life; the biggest educational institution in the world; every soldier to be given an equal opportunity for education and special training for civilian employment; keeping up with the stay-at-homes.

EDUCATION OF DEAF.

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Continued from November number.
178. **Bartlett, Bertha L.** How a mother taught herself how to train her deaf child. *Volta review*, 20: 733-38, December 1918.
Continued from November number.
179. **Pintner, Rudolf.** The measurement of language ability and language progress of deaf children. *Volta review*, 20: 755-66, December 1918.
Emphasizes the need for greater coordination among deaf schools, for a more uniform system of grading; also for a better classification of the pupils according to their abilities in each subject.

EXCEPTIONAL CHILDREN.

180. **Michigan.** Department of public instruction. Backward and deficient children. A study of sub-normal children in the rural schools of Michigan. [Lansing] The superintendent of public instruction, 1918. 22 p. tables. 8° (Bulletin no. 25)

LIBRARIES AND READING.

181. **American library association.** Papers and proceedings of the fortieth annual meeting . . . held at Saratoga Springs, N. Y., July 1-6, 1918. Chicago, Ill., American library association, 1918. p. 43-383. (*Its Bulletin*, September 1918) (George H. Utley, secretary, 78 East Washington street, Chicago, Ill.)
Contains: 1. A. E. Bostwick: The future of library work, p. 50-57. 2. F. K. Walter: The war and library training, p. 98-103. 3. Herbert Putnam: The library war service, p. 103-5. 4. J. C. M. Hanson: What the university library is doing to help win the war, p. 192-96. 5. M. S. Dudgeon: What men read in camps, p. 221-22. 6. School libraries section, p. 306-7.
182. **Braisted, William C.** Books every boy should read. *American boy*, 20: 10, January 1919.
The Surgeon-general of the U. S. Navy gives a list of books which boys should read. He says that "Good books give something more than entertainment and instruction—they give power."
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Address before the New York state library association, Lake Placid club, N. Y., September 27, 1918.
Points out some of the methods of library promoting used successfully in the emergency of war in the camp libraries.

BUREAU OF EDUCATION: RECENT PUBLICATIONS. .

184. American agricultural colleges. A study of their organization and their requirements for admission and graduation. By Chester D. **Jarvis**. Washington, 1918. 125 p. (Bulletin, 1918, no. 29).
185. Constitution of a community association. Washington, 1919. 12 p. (Community center circular no. 1, January, 1919).
186. Facilidades ofrecidas a los estudiantes extranjeros en los colegios y universidades de los Estados Unidos de la America del Norte; por **Samuel Paul Capen**. Washington, 1919. 222 p. plates. (Bulletin, 1918, no. 16).
187. Resources and standards of colleges of arts and sciences. Report of a committee representing the associations of higher educational institutions; prepared by **Samuel Paul Capen**. Washington, 1918. 79 p. Bulletin, 1918, no. 30).
188. The Spring manual of the United States school garden army. Washington, 1919. 31 p.
189. Vocational guidance and the public schools; by **W. Carson Ryan, jr.** Washington, 1919. 151 p. (Bulletin, 1918, no. 24).

NEW PERIODICALS.

- Americanization.** Vol. 1, no. 1, September 1918. Published monthly. Bureau of education, Washington, D. C.
- Carry On;** a magazine on the reconstruction of disabled soldiers and sailors. Vol. 1, no. 1, June 1918. Published monthly. Office of the Surgeon General, Washington, D. C.
- Chicago schools journal.** Vol. 1, no. 1, September 1918. Published monthly, from September to June. Board of education, Chicago, Ill.
- Educational film magazine.** Vol. 1, no. 1, January 1919. Published monthly. 33 West 42d Street, New York, N. Y.
- El estudiante latino-americano.** Vol. 1, no. 1, July 1918. Published bi-monthly. Committee on friendly relations among foreign students, 347 Madison avenue, New York, N. Y. (J. M. Hernandez, editor, Ann Arbor, Mich.)
- National school service.** Vol. 1, no. 1, September 1918. Published semi-monthly. Department of the Interior, Washington, D. C.
- School life.** Vol. 1, no. 1, August 1, 1918. Published semi-monthly. Bureau of education, Washington, D. C.
- Vocational summary.** Vol. 1, no. 1, May 1918. Published monthly. Federal board for vocational education, Washington, D. C.



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EDUCATION IN THE TERRITORIES AND DEPENDENCIES

[Advance Sheets from the Biennial Survey of Education
in the United States, 1916-1918]



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EDUCATION IN THE TERRITORIES AND DEPENDENCIES.

CONTENTS.—Education in Porto Rico—Education in the Canal Zone—The Virgin Islands—Hawaii—The Philippine public-school system—Education in Alaska.

EDUCATION IN PORTO RICO.

By PAUL G. MILLER,

Commissioner of Education for Porto Rico.

The work of the public schools has been greatly handicapped during the past year through conditions brought about by the World War. The department has lost many of its most efficient men, who went into the military service. Due not only to war conditions, but also to the prevailing low salaries, frequent changes in the teaching corps have taken place, with the resulting loss of efficiency. The rural teaching force alone underwent 730 changes, whereas in the city of San Juan there were no less than 110.

In spite of these obstacles the work of the schools has been characterized particularly by the various activities carried on by supervisors, teachers, and pupils toward promoting the success of the United States and its allies in the World War. The war activities of the schools will ever stand out conspicuously as witnesses of the loyalty and patriotism of all. In this respect the work may be justly counted as a year of achievement and accomplishment unparalleled in the history of Porto Rico.

Special attention has been devoted to increasing the food supply through school and home gardens, both rural and urban.

For the promotion of community and war propaganda, and especially for agricultural development, committees were organized which conducted public gatherings. Parent associations, also, held public meetings; teachers visited rural homes; and in cooperation with the food commission rural conferences were held. These activities will be elaborated under their respective heads.

The chapter school committee of the Porto Rico chapter, American National Red Cross, effected local organizations of the Junior Red Cross in every municipality. In response to a special appeal made

by the commissioner, 2,587 teachers out of a total of 2,649 in the service at the close of the year made a special contribution to the second war fund, which, together with amounts given by the office staff of the department, the supervisory force, employees of the university, and certain employees of school boards amounted to \$6,665.89.

Porto Rico has an estimated population of 1,223,981, of whom 427,666 are of legal school age, i. e., between 5 and 18 years, and 215,819 of compulsory school age, i. e., between 8 and 14 years. The total enrollment in all public schools, excluding duplicates, was 142,846. Of these, 84,570 were enrolled in rural schools; 50,060 in elementary urban schools; 3,346 in secondary schools; 3,613 in night schools; and 1,257 in the University of Porto Rico. Of the 141,589 pupils enrolled in schools under the department, 80,063 were males and 61,526 females; 113,462 were white and 28,127 colored. In addition to the pupils enrolled in public schools, 7,248 children attended private schools.

The total enrollment was 33.1 per cent of the total population of school age and 65.6 per cent of the population of compulsory school age.

The average number belonging in all schools was 115,689; the average daily attendance 106,441, or 92 per cent. Of the 141,589 pupils enrolled, 2.4 per cent were found in secondary schools, 35.3 per cent in elementary urban schools, 59.8 per cent in rural schools, and 2.5 per cent in night schools.

These pupils were taught by 2,715 teachers, of whom 909 were men and 1,806 were women; 174 were teachers from the United States proper and 2,541 were native Porto Ricans; of the total number, 2,230 were white and 485 colored.

Of the elementary pupils, 62.7 per cent were promoted to the next higher grade, as against 60.1 per cent the preceding year. These figures are based upon the total enrollment. Using the average number belonging as a basis for calculating promotions, 81.8 per cent of the elementary urban pupils were promoted and 72.6 of the rural pupils, giving an average of 76.2 per cent for all elementary schools.

Eighth-grade diplomas were awarded to 2,035 pupils, and 347 high-school pupils received diplomas.

There were 42 new graded teachers added to the profession by means of licenses granted upon the basis of normal diplomas issued by the University of Porto Rico; 30 rural licenses were granted to persons who had completed the special two-year course for rural teachers in the normal department of the University of Porto Rico; and four rural licenses were granted to persons who had obtained the diploma in agricultural science issued by the College of Agriculture and Mechanic Arts.

Summer schools for the training of rural teachers were held at Río Piedras and Mayaguez, at the close of which 74 rural licenses were issued. Special examinations for the licensing of rural teachers were held also in October and November, resulting in the granting of 240 more rural licenses. This number, however, was not sufficient to supply the schools of the island, and it became necessary to issue 169 provisional licenses before the close of the year.

The schools of Porto Rico were conducted in 1,712 separate school buildings, representing 2,845 classrooms. Of these buildings, 540 are public property and 1,172 are rented; 316 are situated in urban centers and 1,396 in rural barrios. As to their character, school buildings range from the straw-covered shack in remote rural barrios to thoroughly modern concrete structures in the larger towns and cities. During the past two years 88 new sites for school buildings have been acquired, 20 in urban centers and 68 in rural districts; 58 school buildings, 17 urban with 141 rooms, and 41 rural with 49 rooms, have been erected during the same period.

The total assessed valuation of property is \$243,736,262, or \$199.01 per capita of population.

The expenditure for educational purposes last year was \$1,634,-313.99 from insular appropriation and other funds and \$730,947 from school-board funds, making a total of \$2,365,260.99.

The total per capita expenditure per pupil was \$12.63 for elementary education and \$41.92 for secondary instruction. The per capita expenditure per inhabitant was \$1.93.

SCHOOL ALLOTMENT—URBAN VERSUS RURAL SCHOOLS.

Of all the children of school age in Porto Rico, 344,615 live in the rural barrios. Of this number, 84,570, or 24.5 per cent, were enrolled in the rural schools during the past year, whereas of the 91,604 children of school age living in the urban centers, 53,406, or 58.3 per cent, were attending school. This takes no account of a total of 3,613 enrolled in the night schools.

The above summary goes to show that in the urban centers over one-half of the population of school age is attending school, while in the rural districts this holds true for but one-fourth of the population. In other words, in order to enroll the entire population of school age, the number of urban schools would have to be multiplied by 2 and the number of rural schools by 4. Such an increase is totally out of question for the present in view of the economic status of the island. The fact that but one-fourth of the rural population of school age is at present enrolled in the rural schools by no means signifies that the remaining three-fourths are deprived of an opportunity to attend school. The reverse is nearer the truth. Probably

no less than three-fourths of the rural population attend school for a limited number of years, while perhaps less than one-fourth fail to avail themselves of the opportunities that are at hand. Furthermore, the period of school attendance in the Tropics is necessarily shorter than in a northern climate. Not a few of our young men and women marry and assume family cares before they have attained the maximum school age. Any attempt, therefore, to enroll the total population of school age is, and will ever be, impossible of attainment in Porto Rico.

The relative needs of the urban and rural populations have always been calculated on the figures given by the island census without regard to actual conditions, and the tendency as a result has invariably been to favor the rural population at the cost of the urban centers. This is shown by contrasting the provision for common schools in the budget of 1913-14 with that of the budget for 1917-18.

Urban and rural teachers provided for.

Teachers.	Year 1913-14.	Year 1917-18.	Increase.
Total urban teachers provided for.....	985	997	<i>Per cent.</i> 1.2
Total rural teachers provided for.....	1,141	1,660	45.4

The results of this policy have been that, whereas in many municipalities rural teachers are unable to fill their schools to their normal capacity, in many of the urban centers, notably in such towns as San Juan, Ponce, Caguas, Bayamon, and Aguadilla, hundreds of children who clamor for admission at the opening of each school year have to be turned away. The absolute shortage of urban schools has been more especially felt of late years as a result of the city growth and the abolition of the double-enrollment plan.

RURAL EDUCATION.

The number of rural schools opened was 1,440. This takes no account of the rural schools opened in the semiurban zone and in some of the urban centers, as these schools follow the graded course of study and are considered part of the urban school system. The withdrawal of teachers, both urban and rural, to go into military service and into other work, has been one of the most perplexing features. An unusual number of graded and rural teachers resigned, and as vacancies in the corps of graded teachers are generally filled by the promotions of rural teachers who hold the graded license, the rural schools were the ones particularly affected. A total of 730 changes took place in the rural schools last year. This means

that approximately one-half of the rural schools have had more than one teacher during the year.

The numerous changes made the work of the supervisory force and of the department particularly difficult. To train a total of 730 new teachers, practically half the rural teaching force, to a satisfactory standard of efficiency is a problem to tax the industry, patience, and skill of the best supervisory force. The policy of the department under such circumstances has necessarily been to emphasize constructive supervision. Professional study and reading courses have been established; frequent teachers' meetings and demonstration classes have been held in all the districts; and everywhere much of the supervisors' time has had to be devoted to the strengthening of this unduly large proportion of new rural teachers.

For the purpose of further awakening public interest and of extending the usefulness of the rural schools, the rural uplift campaign initiated three years ago was given continued emphasis. All supervisors of schools gave particular attention to rural school organization, paid longer and more thorough visits to rural schools, held frequent conferences for rural teachers, and ultimately checked promotions in all rural schools grade by grade by making a personal examination of every pupil recommended for promotion. A much greater proportion of rural teachers lived in the barrios where their schools were located, and such teachers became a vital factor in neighborhood life. Teachers living in the barrios not only gave to the patrons of the districts an example of sanitary and wholesome living, but they often made the schoolhouse a social center, where parents' meetings, evening schools, and lectures were held. Where agriculture was stressed, teachers became the natural leaders of the food-supply propaganda, which has increased the available local food supply considerably. Libraries were opened for country districts, and teachers paid many visits to the parents in their homes.

The department has directly aided many of the supervisors by sending speakers to parents' meetings, which, as a rule, were held on Sundays. Supervisors report that the attendance at these Sunday meetings reached as high a figure as 400 persons. To-day the peasant of Porto Rico has come to realize that the rural schools belong to him as much as to the landowner or rich planter of his district.

To carry out this rural campaign has required much sacrifice on the part of the supervisors and rural teachers. To teachers accustomed to the comforts of city life, the isolated life of the country has entailed no small hardship, but results have compensated them for such unselfish service. Many supervisors who have stressed the rural campaign have given up almost all their Sundays to this work. While such labor is onerous, it is only by such devotion to the cause that the ultimate redemption of the illiterate peasant will be achieved.

Out of 1,440 rural schools, 1,262, or 87 per cent, were on the double-enrollment plan; i. e., they have one group of pupils, up to a maximum of 40, during the three hours of the morning session and another similar group in the afternoon for the same length of time. This arrangement allows the pupils to take their noonday meal at home, and also makes it possible for the older ones among them to help their parents at home and on the farm during part of the day. This is a very important consideration during the coffee-picking season, from September to December, when the entire population of some of the districts, old and young, is employed in the coffee harvest. This double-enrollment plan, while it has its serious disadvantages, insures a better enrollment and attendance.

The total number of pupils enrolled in the rural schools during the year was 84,570; and of this total, 48,821, or 58 per cent, were promoted. This low percentage of promotion is largely accounted for by the frequent changes in the teaching force and the closing of many schools for want of teachers.

CONSOLIDATED RURAL SCHOOLS.

A familiarity with the rural-school situation leads to the inevitable conclusion that the need is for *better schools*, rather than for *more schools*. The emphasis must be placed on better buildings, better equipment, on a fuller and necessarily longer course of study, with special provisions for the teaching of home economics, manual training, agriculture, and other industrial subjects. This will demand better teachers and, as a logical accompaniment, higher salaries. The consolidated rural school brings together three, four, or more rural schools within one building or common center, in contrast with the present isolated school plan, whereby an underpaid and often poorly prepared and immature teacher has to struggle as best he can with three, four, or more grades under his sole charge and with a large enrollment on the half-day plan. Such consolidated rural schools should eventually become the community centers of their barrios; and rural libraries, noonday lunches for the underfed pupils, medical inspection, and entertainments are some of the community improvements that would be brought within the scope of practical, successful achievement.

GRADED SCHOOLS.

The work of the graded schools has been carried on along very much the same general lines as in former years. The more important changes have been the following:

1. The teaching of English on a strictly oral basis, which last year was introduced in the first grade of the urban schools, has been ex-

tended to the second grade of the urban and to the second and third grades of the rural schools as well. In addition to the First Grade Manual in Oral English, which was published last year, a manual for the second grade has now been put into the hands of all primary teachers. A Third Grade Manual has also been under preparation and has been given a thorough preliminary test in some districts.

The shifting from reading to conversation as a medium for the teaching of English in the primary grades meets the needs of pupils and leads them along a natural and easy road to the stage where they are enabled to carry on the bulk of their studies in the English language, as is required of them in the intermediate and grammar grades. It brings the Porto Rican child in this particular respect one step nearer to the level of the American child who hears and talks English four or five years before he is required to read it.

2. The policy of the department to provide pupils with books specially designed for them was further advanced last year by the introduction of a specially prepared textbook in arithmetic for the use of third and fourth grade pupils. The text is in Spanish. It supplements and carries forward the beginning made last year when a special manual for the teaching of arithmetic in the first and second grades was prepared and issued to the teachers.

3. A special pamphlet on moral and civic training has also been prepared and issued. Formal instruction in this subject has now been made a brief but regular feature of the daily program of our schools. The need for something of this sort was realized a long time ago. The past history of the island, the limited experience of the people in self-government, the illiteracy which still prevails in the country districts, and the relatively few agencies, outside of the public schools, making for the enlightenment and the upbuilding of the people along moral and social lines, brought the need for such a course into plain evidence.

The improvement which has taken place in the primary grades as a result of the introduction of a better coordinated system of teaching such elementary subjects as Spanish, English, writing, and arithmetic, in closer harmony with the needs and the life experience of Porto Rican children, has everywhere been a remarkable one. Better general results are evident, and this appears in the percentage of promotions from these lower grades.

This improvement is further due to the introduction and use of specially prepared textbooks in which the standpoint of the Porto Rican child, his experience, and his needs are given due consideration. The department plans to extend gradually the policy of using specially prepared books and to exclude those which do not provide for the special requirements of the Porto Rican child.

HIGH AND CONTINUATION SCHOOLS.

Secondary school work was carried on in 11 high and 26 continuation schools, not including the University High School at Rio Piedras, nor the preparatory department of the College of Agriculture and Mechanic Arts, Mayaguez. In addition to the 11 regular four-year high schools, ninth grade work was taught in 26, and tenth grade work in 11 municipalities.

The total enrollment in secondary schools was 3,346, of which number 1,584 were boys and 1,732 were girls. These figures show an increase in the enrollment over that of any previous year, but a relative decrease in the number of boys enrolled as compared with the preceding year. The enrollment was distributed as follows: Twelfth grade, 382; eleventh grade, 601; tenth grade, 898; ninth grade, 1,465.

The total number of graduates from the 11 department high schools was 347; from the general course, 310; from the commercial course, 37. The University of Porto Rico issued 71 secondary diplomas.

Difficulty in securing texts and supplies because of delays in transportation, the shifting of teachers because of vacancies brought about by war conditions, and the decrease of enrollment due to economic conditions, made the year a trying one to teachers, principals, and supervisors. Notwithstanding these adverse conditions, the quality of work done was generally satisfactory, and no cases of infraction of discipline marred the year's work.

The Central High School at San Juan continued to occupy a building entirely unsuited for a school. Lack of teaching force and schoolroom capacity made it necessary to refuse admission to many applicants, and as a consequence ninth grades were organized at other school centers in San Juan; but even by the organization of these extra ninth grades many ambitious young people could not secure admission.

WAR WORK OF THE SCHOOLS.

The all-prevailing activity of the schools during the year was the work of teachers and pupils in connection with the World War. The complete mobilization of the vital forces and material resources of the Nation for the successful prosecution of the war which had been effected throughout the United States had likewise been put into operation here. Porto Rico, which had but recently been granted the privilege of American citizenship, could not remain indifferent to the conflict in which the Nation had become involved.

THE FOOD QUESTION.

Although in its commercial relations with the mainland Porto Rico during the fiscal year ending June 30, 1917, had a balance in its favor of 27 million dollars, largely as a result of its constantly growing exports of sugar, tobacco, and fruit—the exports under these three heads alone totaling \$70,468,907—it nevertheless depended upon the United States for a very large proportion of its food supply.

The war brought into striking relief all the disadvantages and dangers of Porto Rico's dependence upon the distant markets of the United States for her daily food supply and the need of taking immediate measures to place herself on a relative basis of self-support. It is owing to this that the appeal of the United States Food Commissioner, to save food and to add to the sources of its supply, carried special weight in the case of Porto Rico. The appeal fell on soil already prepared. To the incentive of patriotism there was added the all-compelling force of the instinct of self-preservation.

COOPERATION WITH THE PORTO' RICO FOOD COMMISSION.

In the matter of promoting the agricultural interests, the department worked in cooperation and harmony with the local food commission. A total of 35 supervisors of agriculture were employed during the year. Twenty-five of these were special agents of the food commission and were paid out of its special funds. The remaining 10 were paid out of the funds of the department. All, however, were in equally close relations with the department, and all worked through and with the supervisors and teachers of the public schools for the improvement of the food situation. Teachers everywhere, those in the country districts especially, served as distributing agents for the pamphlets and circulars issued by the food commission. Rural teachers acted as the local representatives of the commission, collected the necessary information, and made regular reports of the food situation of their respective barrios.

FOOD CONSERVATION WEEK.

All the wheat flour consumed in Porto Rico, a total of 310,516 barrels for the fiscal year 1916-17, was imported from the United States. Wheat being the cornerstone of the national food conservation campaign, it behooved Porto Rico to do its share in the conservation of this food product. As wheat does not grow in the Tropics, Porto Rico could only help by limiting its consumption of white bread. A further appeal was made by the food commission for economy in the consumption of such other imported foodstuffs as

were needed by the people of the allied countries. To bring about this result an island-wide campaign of education and propaganda became necessary. A direct appeal had to be made to the patriotism and good will of every inhabitant. A large part of this work naturally devolved upon the rural schools.

During "Food conservation week" a campaign was conducted by public-school teachers in every town and barrio of the island. The number of public meetings held during that week exceeded 2,000. Both urban and rural teachers made a house-to-house canvas to explain the meaning of the pledge card and to secure signatures.

A grand total of 122,826 pledge cards were signed through the efforts of the schools.

AGRICULTURAL AND PATRIOTIC PROPAGANDA.

The following summary will show the nature and extent of the campaign carried on by the schools:

1. Number of agricultural committees (Comités de Fomento Escolar y Agrícola) organized.....	1, 177
2. Number of public meetings held by these committees.....	2, 380
3. Number of parents' associations.....	831
4. Number of public meetings held by these associations.....	1, 297
5. Number of rural conferences.....	2, 157
6. Number of rural homes visited by teachers.....	60, 038

These thousands of home visits and public meetings have made a deep and lasting impression on the people. The necessity of food economy, of increased food production, of improved methods of cultivation, and of planting a greater variety of products has been preached to the remotest rural barrio of the island.

Patriotic propaganda has also been stressed. A campaign of education to explain the causes and the aims of the war, its relation to the people of the United States and of Porto Rico, the duty of every citizen to contribute to the successful outcome of the conflict the fullest measure of his powers and resources, has been conducted from one corner of the island to the other.

WAR LITERATURE AND PATRIOTIC INSTRUCTION.

Teachers have found ample material, both for their daily classes and for their conferences with the people of their respective communities, in the literature that has been supplied them by the department and by the insular food commission. A number of pamphlets from various patriotic organizations in the United States were also mailed to the teachers. In addition the department procured a full supply of the monthly bulletins issued by the Commissioner of Education of the United States, entitled "Lessons in Community and

National Life," and incorporated these in the regular course of study in English and civics for all the upper grades of the common schools and for the continuation and high schools. "Democracy To-day," a collection of President Wilson's principal war addresses, as well as speeches by other statesmen, properly edited for class work, was used as a text in high-school work. Spanish copies of "How the War Came to America," published by the Committee on Public Information, were distributed to all teachers and school board members in order to enable them to become thoroughly posted on the issues on which the Nation entered the war.

The result has been that many of the teachers and not a few of the older pupils have become efficient propagandists, ready and able to take part in the molding of public opinion along patriotic lines.

AGRICULTURAL COMMITTEES.

In order to popularize the movement for food conservation and for increased food production, a local committee officially known as "Comité de Fomento Escolar y Agrícola" was formed in every barrio. Each was composed of five influential citizens, preferably farmers of the more intelligent and progressive class. These committees met periodically in the schoolhouse and planned their work in close cooperation with the rural teacher and with the agricultural agent of the district. Each committee held public meetings for purposes of propaganda among the inhabitants of the barrio. The local teacher and a number of prominent people from the near-by town took an active part in the meetings. The supervisor of schools and the agricultural agent of the district also took part whenever their other duties permitted. A total of 1,177 of these committees were organized during the year, and they held a total of 2,380 public meetings.

PARENTS' ASSOCIATIONS.

The organization of parents' associations dates back three years. While a certain number of these associations were this year merged into the agricultural committees and in a way absorbed by them, many carried on their independent activities. A total of 831 such associations held 1,297 public meetings. While the subjects discussed had a special relation to the life of the school in its more limited educational or professional aspect, questions of general interest and especially those related to the World War did not fail to receive their due share of attention.

RURAL CONFERENCES.

In addition to the meetings held under the auspices of agricultural committees and parents' associations, all more or less local in

character, conferences of a more general nature have been held under the immediate direction of the supervisors of schools in all the towns and main barrios. Special speakers were secured for these conferences, both the insular food commission and the department of education sending representatives. The local municipal authorities, professional men, and many public-spirited citizens throughout the island gave their services as speakers. At the close of the year the commissioner of education sent a personal letter of thanks and appreciation to each of these. A total of 2,157 of these general conferences were held during the year.

Universal enthusiasm has been aroused by this island-wide propaganda. This is the first time in the history of Porto Rico that a campaign of education has been undertaken in behalf of the population at large. These meetings have served as popular forums in which questions of public interest have been brought to the attention of a people the majority of whom are still illiterate and who can not be reached by means of the daily press or any other agency except direct contact. Porto Ricans have come to realize the meaning of the great war, their responsibilities and their opportunity of demonstrating their loyalty to the Nation and to the cause for which it fights.

The success obtained in increased food production is most gratifying. Above all, the home garden movement holds special promise for the future.

During the past year there were established 1,312 rural and 83 urban-school gardens used for instructional purposes. Only 103 rural schools did not have school gardens, generally for lack of land. The schools fostered the cultivation of 5,548 urban home gardens and 21,145 in the country.

The large farm and plantation owners have come to realize the need for a greater variety of products. They now plant large acreages in corn, beans, potatoes, onions, and yautías, whereas in the past they limited their activities to a few standard products, to cane, coffee, tobacco, and the like. Better methods of cultivation have been advocated and their importance is better understood. Certain sections of the island not only raise enough vegetables for their own needs but now produce a relative surplus for other markets.

Twenty-five agricultural exhibits held in various towns toward the close of the school year have attracted deserved attention, both for the quality and for the quantity of the products exhibited. Some of these exhibits compare very favorably with those held in the United States.

WORK IN HOME ECONOMICS.

The course of study in home economics, including both cooking and sewing, comprised four years of work, extending from the seventh through the tenth. This work was conducted in 42 municipalities.

A two weeks' summer school for teachers of home economics was held in August to study the new conditions and the new work for the ensuing school year.

Owing to changed living conditions, due to the war, the course of study in practical cooking was changed entirely. Since it was feared that communication with the mainland might be cut off, special bulletins were prepared to instruct students and their families in a diet that would make use of local food products. An effort was also made in these bulletins to increase local production of the necessary carbohydrates, proteids, and fats.

Recipes for the preparation of pie and bread were entirely omitted, quick breads and local substitutes taking their places. In all other recipes calling for wheat flour, starch extracted from native vegetables such as yautía and batata was substituted. A simple home process was explained whereby the large percentage of starch contained in these vegetables could easily be extracted. Children learned to make use of this starch for thickening sauces, soups, and gravies, the starch serving as an excellent substitute for flour and the corn starch ordinarily used. Lard and butter were omitted from all recipes, and coconut fat, coconut milk, or coconut butter substituted. Coconut fat was extracted and bottled in the classroom. Frying was eliminated and baking substituted. In place of bread there were substituted baked or boiled yautía, baked or boiled batata, baked plátanos, casabe, sorullos, arepas, gofio, hallacas, and corn bread. Slices of boiled yautía and boiled batata displaced bread in making sandwiches, for which as a filling peanut butter, shredded coconut, or a combination of these was used.

While the students of home economics were taught a year ago the possible use of local food products in the event of a food shortage, the sinking of the *Carolina* brought home to the people the absolute practicality of such teaching, and increased interest in both students and outsiders developed with very gratifying success. As the result of a year's teaching along these lines, the number of home gardens increased materially. In nearly every town, every student of home economics had a garden. Gardens were planted and studied by girls as a war measure so that women might learn to produce as well as to prepare food.

An exhibit of the year's work was held in each town at the close of school. Collections of starch, wheat bread substitutes, industrial

cards, and sewing work were shown. Laundering utensils, the proper setting of a table, and invalid trays were often included. The care and feeding of infants was demonstrated by means of a doll dressed as a baby, showing clothing, feeding bottle, and bed.

EXTENSION WORK IN HOME ECONOMICS.

Mothers' classes taught in Spanish were given by Porto Rican teachers of home economics once a week. These classes covered a period of two hours. The use of wheat substitutes and war-time menus was studied. These classes varied in size from 10 to 80 persons. In small classes actual cooking was done; in larger ones, demonstration lectures were given.

Neighborhood evenings were held once a month in the home economics room, at which meetings subjects relating to home and community life as affected by the war were discussed. Men, women, and older students attended these meetings, which usually were crowded. Extension work by the teachers of home economics was carried on in some of the rural districts by means of lectures and demonstrations. Bread substitutes were taught and gardening was encouraged at these meetings.

SEWING.

Sewing classes studied the change produced in the clothing problem by war. Clothing conservation was taught, as well as the purchase of durable clothing and the elimination of unessentials, such as laces, ribbons, dress trimmings, and jewelry. All fourth-year classes made pajamas for the Red Cross.

The change made in the course of study in the past year has facilitated still greater adaptation to war conditions. The practice secured will make it possible to do much work in refugee garments, while the hospital garments will continue to be made as long as money and materials are available.

MANUAL ARTS.

The work in manual arts for the past year has been badly handicapped because of the entrance of more than one-half of the teaching force into the military service of the United States. The other half was left in a restless condition, but, in spite of this fact, the year's work as outlined was completed and many problems bearing upon the construction of articles suitable for use by the Red Cross and the Young Men's Christian Association were worked out. These included knitting needles, food driers, beds, tables, bed supports, checker boards, and folding chairs. The manual arts classes in

every town where this subject was taught made bulletin boards for the posters of the United States Food Commission. All this work was done in addition to the regular repair work, class work, and community work done by the pupils.

In order to fill many vacancies in the manual arts teaching force, caused by war conditions, a summer session was held at the College of Agriculture and Mechanic Arts for high-school graduates who had done exceptional work in this subject and who were especially recommended by the respective supervisors of schools. The results of this summer school were gratifying, though most of the candidates were necessarily young, the average age being 21 years. Enough candidates were obtained to fill all vacancies.

JUNIOR RED CROSS DRIVE.

The commissioner of education, the president of the school board of San Juan, and the supervisor of home economics were designated as the chapter school committee of the Porto Rico chapter of the American National Red Cross for the purpose of organizing and carrying out the Junior Red Cross drive. In every municipality there was appointed a local committee of three members, consisting, as a rule, of the supervisor of schools or the acting principal, the president of the school board, and a teacher, usually the teacher of home economics.

Owing to the fact that the public schools were engaged in one kind of war work or another since the outbreak of the war, the committee delayed organizing the Junior Red Cross membership and financial campaign until the early part of the month of May.

Teachers and children, aided by a generous public, responded loyally and patriotically to the efforts of the chapter school committee and local committees. The results are considered exceptionally good when one bears in mind the poverty prevailing in many parts of Porto Rico, and also the fact that no special effort was made to carry the campaign to rural schools.

In 52 municipalities all the urban school pupils were enrolled as members of the Junior Red Cross, and in 11 municipalities, namely, San Juan, Ponce, Arecibo, Fajardo, Guayama, Gurabo, Hatillo, Juncos, Patillas, Barceloneta, and Camuy, all pupils, both urban and rural, were so enrolled. The total membership at the close of the year was 68,013, and the total amount contributed \$21,501.22.

AMERICAN RED CROSS.

In addition to the activities in behalf of the Junior Red Cross many teachers have aided in the work of the Porto Rico chapter of the American Red Cross wherever it had local organizations.

During the second war-fund drive an effort was made to have all employees of the insular government give one day's pay as a special contribution to this fund. An appeal was sent to supervisors and teachers by the commissioner, urging them to make one more sacrifice in addition to those already made. Of 2,649 teachers in the service at the close of the year, 2,587 made this special contribution.

LIBERTY LOAN CAMPAIGNS.

The schools have taken an active part in the Liberty Loan campaigns for promoting the sale of liberty bonds. They have participated in all the civic parades organized for this purpose, and in a few towns the propaganda for the sale of bonds was directly in the hands of teachers and school boards, who conducted public meetings in which the schools participated. A total of 705 liberty bonds were bought: By the office and supervisory force, 104; by teachers, 522; by schools, 79. Good records for the purchase of liberty bonds were made by the supervisors and teachers of the Fajardo, Ponce, and Yauco Districts.

SCHOOL MEN IN MILITARY SERVICE.

Since the United States entered the World War the department of education and the University of Porto Rico have lost 233 of their best men by their entering the military service. Of these, 10 were supervisors of schools, 12 instructors in the university, 4 high-school principals, 10 high-school teachers, 5 school board members, 18 manual-training teachers, 13 teachers of English, 2 special teachers of agriculture, 49 graded teachers, and 110 rural teachers.

NATIVE INDUSTRIES.

In addition to the courses in home economics and manual training, which have become a regular part of the urban course of study, plain sewing for girl pupils was taught in the urban schools of 27 municipalities and in certain rural schools of 60 other municipalities. While in the greater number of rural schools both boys and girls were required to do garden work, in many there were not enough implements nor sufficient land available to employ both sexes, and in all such cases the girls spent one full period each day in sewing, while the boys were at work in the garden. In very many instances women teachers devoted an hour after the close of the regular daily session to the teaching of sewing, embroidery, and lace work. No additional pay was received for this work.

The teaching of native industries in the schools is a question of momentous importance in connection with the future welfare of the people. This can not, however, be undertaken in a general and sys-

tematic way until such time as the legislature finds it possible to provide special funds for the work. The need of expert supervisors and teachers is especially urgent. This need has been recognized by a number of school boards. Special instructors in hat making, sewing, and embroidery have been employed by some of the boards with good results. But very few of them have funds available for this purpose. An additional preliminary step that must be taken is to increase the available supply of raw materials. In certain sections the hat palm and textile plants are plentiful. In other sections, however, they are not to be had. In a number of towns where plans were made during the year for instruction in hat making, they had to be abandoned owing to the difficulty in securing raw materials. It will therefore be necessary to carry out a systematic campaign for the cultivation of palm and textile plants on a wider scale before a number of native industries can become generalized.

School boards, supervisors, and teachers have been urged to go ahead in this matter independently. The importance of the step is not, however, as yet generally recognized. In but 37 of the municipalities have any efforts been made in this direction. In 38 municipalities absolutely nothing has been done. It is gratifying none the less to report on the results already accomplished in approximately one-half of the districts.

Many of the products of the pupils' industry have found a ready market in the island. In order to command a market in the United States, however, these products will have to be standardized. This department realizes that this is a field for increased attention as soon as the legislature makes the necessary funds available.

SCHOOL LIBRARIES.

Urban school libraries are maintained in 62 municipalities. They report a total of 32,950 volumes, an average of 530 per library. Unfortunately, many of the books which were acquired or donated in years past are not in the least adapted to the needs and interests of school children. Since the department issued an official library guide, however, with the added regulation that all books purchased from school-board funds should be selected from the guide, these libraries are gradually assuming a character and an appearance more in harmony with their purpose. A total of 2,435 new books have been bought for the town libraries during the year at a total cost of \$1,218.55. A considerable number of books have also been donated.

Thirty-four municipalities report the maintenance of rural-school libraries. The total number of books is 5,097, an average of 150 books per municipality. Of these, 1,137 have been bought during the year and are of a nature that will meet the needs of rural pupils.

SCHOOL LUNCHES.

The movement to provide poor school children with noonday lunches was initiated some years ago by individual teachers with the cooperation of public-spirited men and women. The movement has grown to encouraging proportions, although it is still wholly supported by private funds. While it has not been possible to devote any public money to this work, the department is in entire sympathy with it, and it has done what it could to encourage and extend it. A law was enacted by the legislature at its last session to appropriate public funds for it. Unfortunately, the scarcity of funds available for school purposes will nullify the favorable action of the legislature for the present, as other needs of the schools of an even more imperative nature will have to be given preference.

Wherever it has thus far been possible to provide noonday lunches the results have been most satisfactory. Supervisors and teachers report a better attendance and a higher grade of individual work. The "comedor escolar" insures the undernourished child at least one fairly well-balanced meal every school day.

In many instances teachers have through various activities been able to pay a large proportion of the cost themselves. In the town of Lares, for instance, the principal of the schools leased the town theater and gave a moving-picture show throughout the year for the exclusive purpose of providing funds for lunches. This accounts for the fact that the Lares teachers were able to feed, on the average, 50 pupils each day at a cost to the community of less than 1 cent per pupil.

DEPARTMENT PUBLICATIONS.

During the biennium the department issued 214 circular letters dealing with administrative matters, and 11 bulletins for the guidance of teachers bearing directly upon the work of the schools.

The Porto Rico School Review, published under the auspices of the department of education and the Porto Rico teachers' association, was issued monthly during the school year and replaces to a large extent the bulletin heretofore issued in pamphlet form. The Review has developed into a standard professional magazine and serves as a forum for discussion and as a medium for informing the teaching force of matters of educational importance.

TEACHERS' MEETINGS AND INSTITUTES.

In view of the relatively large proportion of new teachers who have come into the service during the past few years, due to the increase in the number of schools and also to the fact that many of the more experienced teachers left school work as a result of war conditions, supervisors have everywhere been called upon to take special

measures to meet this situation. This has called for longer and more frequent visits on the part of the supervisors, and everywhere added importance has been given to such factors as teachers' meetings and demonstration classes.

Of teachers' meetings a total of 327 are reported during the year. This does not include the very many grade or group meetings which have been held at stated intervals in practically all districts. Of these 327 meetings, an average of 7 per district, 166 were graded teachers' meetings, 87 were for the special benefit of rural teachers, and 74 were general district meetings.

The following subjects are illustrative of the practical nature of the themes discussed:

- Purpose and value of seat work.
- Types of seat work.
- Teaching of English and Spanish in the primary grades.
- English pronunciation.
- Moral and civic training.
- Securing the cooperation of parents.
- The hour plan.
- Teaching children how to study.
- Socializing the recitation.
- Motivation of school work.

Activities connected with the war received their full share of attention. Food conservation and extension of the food supply, school gardens, the American Red Cross, the Junior Red Cross, Liberty Bond campaigns, and War Savings Stamps were common topics of discussion, and in all the districts special meetings were devoted to these subjects.

Series of practice or demonstration classes have been held in many of the districts for the special benefit of weak or inexperienced teachers. Another practice which has been followed to a much greater extent than in the past has been that of allowing weak teachers a visiting day. In many instances teachers have shown a readiness to undergo the expense and trouble of visiting some of the larger educational centers, away from their respective towns, to observe the work of the more successful teachers and to familiarize themselves with certain experiments that were being conducted in educational lines.

General teachers' institutes were held at Aibonito, Guayama, Bayamon, Humacao, Quebradillas, San German, and Caguas. Other institutes, somewhat more local in character, were held at Fajardo, Manati, and Maricao. At all these meetings representatives from the department assisted the local supervisors. The nature of the meetings was constructive rather than corrective, as has been the practice in the past. Demonstration classes were given, and certain subjects of the course of study received definite attention.

ACADEMIC AND PROFESSIONAL QUALIFICATIONS OF THE TEACHING FORCE.

As an index to the amount and kind of academic and professional qualifications of the teaching force of Porto Rico, the following table is presented, showing the bases of the licenses held by the teachers:

TEACHERS HOLDING THE PRINCIPAL'S LICENSE.

Degree from a college or university.....	25
Four years' normal training.....	244
By examination.....	50

HIGH-SCHOOL TEACHERS.

Degree from a college or university.....	26
Four years' normal training.....	13
Two years' normal training.....	1
Upon basis of experience or special training.....	13

SPECIAL TEACHERS.

Degree from a college or university.....	21
Four years' normal training.....	32
Two years' normal training.....	1
Upon basis of experience or special training.....	37

TEACHERS OF ENGLISH.

Degree from a college or a university.....	44
Four years' normal training.....	45
High-school or academy diploma or previous license.....	19
By examination.....	3

GRADED TEACHERS.

Degree from a college or a university.....	2
Four years' normal training.....	3
Two years' normal training.....	879
By examination.....	783

RURAL TEACHERS.

Two years' normal training.....	9
By examination.....	1, 133
Total.....	3, 362

SUMMARY.

Teachers holding a degree from a college or a university.....	118
With four years' normal training.....	317

With two years' normal training -----	800
Upon basis of experience or training -----	50
With high-school or academy diploma or previous license -----	18
Entering by examination -----	1,969
Total -----	3,362

PROFESSIONAL READING COURSES.

An organized effort has been made during the past three years to raise the professional standard of the teachers by providing them with a number of the best and latest books on educational questions. As a result, reports received from supervisors all point to the unquestionable improvement which has been brought about in the general attitude and in the efficiency of the teachers. During the year just closed no insular funds have been available for the purchase of professional books. An appeal was, therefore, made to teachers to purchase the books, indicated for the year's reading course, out of their own funds. They responded readily. The books thus purchased will be available for reference during succeeding years, and every teacher will thus have the nucleus of an individual professional library to which, it is hoped, each will add as his means will permit.

The books recommended for the year's reading course were as follows:

1. For rural teachers:
Social problems in Porto Rico—*Fleagle*.
Jean Mitchell's School.
2. For urban teachers from the first to the fourth grade:
Motivation of School Work—*Wilson and Wilson*.
A Schoolmaster of a Great City—*Patri*.
3. For urban teachers from the fifth to the eighth grade:
Motivation of School Work—*Wilson and Wilson*.
Education for Character—*Sharp*.
4. For high and continuation school teachers:
Supervised Study—*Hall-Quest*.
Education for Character—*Sharp*.
5. For school supervisors:
Teaching Elementary School Subjects—*Rapeer*.

During the year 1916-17 the following books were prescribed: Earhart's Types of Teaching; Bagley's Classroom Management; Thorndike's Principles of Teaching; and Strayer's a Brief Course in the Teaching Process.

A small but constantly growing collection of professional books is now found in the office of every district supervisor. Standard professional magazines, such as Normal Instructor and Primary Plans, the Porto Rico School Review, Primary Education, and the Elementary School Journal have large numbers of subscribers among the teachers.

The readiness of teachers to make pecuniary sacrifices and their willingness to adopt any suggestions tending to their professional improvement is a decidedly encouraging feature.

RATING OF TEACHERS.

At the close of the school year all the teachers in the active service in the schools of the island were classified according to efficiency of service, a modified form of the Boyce score card being used. Classifications range from E, the highest, to P, the lowest. The latter classification results in the cancellation of the teacher's license and his removal from service.

Summary of the classification of teachers.

Classification.	Urban teachers.	Rural teachers.	Total.
E.....	215	31	246
G.....	835	1,077	1,912
F.....	67	414	481
P.....	2	8	10
Total.....	1,119	1,530	2,649

SCHOOL CELEBRATIONS.

The celebration of school holidays in Porto Rico has been found an excellent means of establishing closer relations between parents and school authorities. On these occasions exhibits of work done in the classroom are usually displayed in order to give the parents an idea of what is being accomplished.

Some of the holidays were observed by appropriate exercises held in the afternoon of the previous day. Of the legal holidays, Washington's Birthday, Columbus Day, Thanksgiving Day, Abolition Day, and Memorial Day were duly celebrated. Arbor Day, Lincoln's Birthday, and Mothers' Day, though not legal holidays, were also generally observed.

The passing of the Jones law, the new organic act under which Porto Rico is governed, was celebrated in several districts by appropriate patriotic exercises. The total number of celebrations held in the 41 school districts was 170.

EDUCATIONAL TESTS AND MEASUREMENTS.

During the year 1915-16 the general educational tests given by the department in Spanish, English, arithmetic, and reasoning produced wide interest and resulted in their extension in many districts. Tests were conducted in 50 of the 74 municipalities. Of the 41 supervisors,

all but 9 gave tests in several grades, while a few supervisors held general tests not only to measure progress with like grades in the same municipality but to compare results with standard measurements. In but few districts, however, was attention given to tests in rural schools.

Two supervisors made use of the Studebaker economy practice exercises as the basis for periodic tests in arithmetic, and one supervisor used the Courtis tests for the same purpose. The Ayres measuring scale for ability in spelling was used in many districts, while three supervisors made similar scales for testing the ability of children to spell in Spanish. Although the spelling of English words will necessarily be emphasized throughout the school course, it is believed by several supervisors that, by proper attention to the matter, the spelling of Spanish words can be fixed by the end of the fourth grade. In measuring the ability to write, both the Highland and the Zaner handwriting scales were used.

Tests were held in Spanish, English, writing, physiology, civics, history, arithmetic, memory, and reasoning, but the greatest number was given in arithmetic. Some supervisors emphasized accuracy and others reasoning; all agree that the tests stimulated both teachers and pupils. Most supervisors report that results secured from rural districts were very discouraging.

One supervisor who has carefully prepared and preserved standard work for every subject in every grade reports that "withdrawals are the chief factor in producing retardation." Another supervisor maintains that the entire course of study is too difficult, and that "scarcely any children in any grade are abreast with the work as outlined for the grade."

THE UNIVERSITY OF PORTO RICO.

The University of Porto Rico comprises the Normal Department, the Colleges of Liberal Arts, Law, and Pharmacy, the University High School, and the Practice School, which is attended by elementary school pupils, all located at Rio Piedras; and the College of Agriculture and Mechanic Arts situated at Mayaguez.

RIO PIEDRAS DEPARTMENTS.

Marked improvements have been made during the past year in buildings, grounds, and material equipment. The pharmacy department has been moved into large and well-lighted rooms of the Memorial Building, where it is in close proximity to the physics and chemistry laboratories and fully equipped with the proper laboratory conveniences and necessities. The usefulness of the biology laboratory has been greatly increased.

The library accommodations have been improved, and the library is now under reorganization to conform to the Dewey system. In spite of changes, the university is still badly in need of more and better buildings.

Many students of the university have entered the teaching profession this year by taking special examinations or by securing temporary licenses.

The first steps in a self-survey of the university were taken at the end of the year by securing from each member of the faculty a synopsis of each course offered by him during the current year, and detailed comments and suggestions concerning the local administration of the university. The most immediate problems connected with the development of the university are financial.

None of the plans for improvement and extension, including the development of the college of liberal arts, the organization of a school of education, a school of medicine, and a school of commerce, and the effecting of a scheme of cooperation with universities and colleges of the United States for the preparation of teachers of Spanish and of commercial students entering the field of Latin-American commerce, can be put into effect until the university has more and better buildings and material equipment, and sufficient funds for increasing the faculty. There is great need of legislation to place the university on a stable financial basis by designating permanent and fixed source of revenue for the university and freeing the institution from the uncertainty of relying upon special appropriations voted at each session of the legislature.

COLLEGE OF AGRICULTURE AND MECHANIC ARTS.

The College of Agriculture and Mechanic Arts has had a year of steady progress, in spite of the same interruptions that have been experienced by all educational institutions since the entrance of our country in the war. The requirement for admission has been raised one year, giving a distinctly older and more serious tone to the whole student body, but resulting in a lower total enrollment, 204 in place of 290 last year. The college was again called upon to supply manual training teachers to fill the gaps in the teaching force of the public school system, gave up students who went into the extension work of the United States Experiment Station as agricultural agents, furnished a full quota of candidates for three training camps for officers, and suffered the most serious loss when eight of the faculty resigned in one week, six to go into the training camp, one into the Young Men's Christian Association work, and one to be director of the Insular Experiment Station. All members of the senior and junior classes of sugar chemists were sent out to help in the labora-

tories of the sugar companies, and without exception have done well. In short, there has never been a time when the training given at the college received such recognition and when the demands for its men were so far beyond its power to fill. Naturally, this demand has reacted favorably on the student body, as a very practical demonstration of the monetary value of thorough work.

Of the three forms of activity in which colleges of this character are engaged—instruction, research, and extension—only the first is properly the function of the college as at present organized. The Federal and Insular Experiment Stations in Porto Rico are each distinct organizations to which the functions of research and extension naturally belong. The importance of instruction in agriculture, particularly in a country where lack of other resources makes the land the sole basis of wealth, is so great, while the funds available are so limited, that attention has been directed to this end.

Experimental work has been carried on in testing vegetables under tropical conditions, in raising Belgian hares as a possible cheap meat supply for the tropics, in poultry, which plays such an important part in the food supply of all warm countries, and in forage and cover crops. In March a very successful three days' agricultural congress was held in connection with the United States Experiment Station, the Insular Experiment Station and the Food Commission to arouse the interest in a greater food supply grown in the island.

CERTIFICATES, DIPLOMAS, AND DEGREES GRANTED.

Rio Piedras department:

College of Liberal Arts: B. S. in chemistry.....	1
College of Law: Bachelor of law.....	13
Normal Department:	
Four-year course diplomas.....	42
Rural teachers' certificates.....	30
High-school diplomas.....	51
Total	137

College of Agriculture and Mechanic Arts:

B. S. in agriculture.....	2
B. S. in civil engineering.....	8
B. S. in mechanical engineering.....	1
B. S. in sugar engineering.....	3
Subcollegiate diploma in agricultural science.....	8
Subcollegiate diploma in polytechnic science.....	12
Total	29
Grand total	166

EDUCATION IN THE CANAL ZONE.

[Summarized from the report of A. R. Lang, superintendent.]

New concrete school buildings at Ancon, Balboa, Pedro Miguel, Gatun, and Cristobal were completed October 1, 1917, but late arrival of school furniture and quarantine at various parts because of prevalence of whooping cough and measles delayed their opening. The enrollment for both white and colored schools, as also the total number of teachers employed, showed a steady increase over those of the two preceding years. The growth of the system is shown by the following-named new positions, authorized for the school year 1917-18:

Supervisor of upper grades, \$2,400 per year (recreated).

Instructor of apprentices, \$2,100 per year.

Teachers (two) of science and mathematics, high school. at \$159.50 per month, each.

Teacher of Spanish and French, \$104.50 per month.

Director of music, \$175 per month.

Manual-training teacher, \$159.50 per month.

Teacher, high school, \$132 per month, effective October 22, 1917.

Teacher, grade, \$104.50 per month. (Seven; one abolished and one high-school position at \$132 created October 22, 1917.)

Other signs of progress are:

(1) The entrance salary for grade teachers was increased from \$95 to \$104.50 per month, effective at the opening of the school year; high-school teachers from \$120 to \$132; and science and mathematics teachers from \$145 to \$159.50.

(2) The eleventh and twelfth grades were added to the Cristobal High School, and the eighth grade was added to the Pedro Miguel white school.

The usual physical examinations of pupils in the white schools were made during the week beginning October 27, and showed the following results:

Total number of pupils examined.....	1,303
Number found needing treatment.....	679
Percentage of those examined needing treatment.....	52
Number with teeth as only defect.....	341
Number with defects other than those of teeth only.....	338
Defects found.....	790
Defects of vision.....	77
Defects of hearing.....	11
Nasal breathing.....	32
Hypertrophied tonsils.....	167
Pulmonary disease.....	5
Bronchitis.....	3
Chorea or other nervous disorders.....	4
Orthopedic defects.....	3
Malnutrition.....	2
Defective teeth.....	441

Defects found—Continued.

Contagious diseases-----	5
Enlarged cervical glands-----	27
Cardiac disease-----	13
Total number of cases treated-----	164
Number of pupils vaccinated-----	89

Work was carried on during the year in the revision of the courses of study in both white and colored schools, which will be put into effect for the year 1918-19.

Night schools at the Balboa High School were started on February 19, 1918, the following subjects being taught: Shorthand, typewriting, bookkeeping, algebra, geometry, English, and Spanish. Tuition was \$4 per month, and salaries of teachers \$4 per night.

Junior Red Cross work was carried on extensively in the white schools, and a Junior Red Cross Auxiliary was organized in each white school and did good work, raising \$640 to be used for materials. School entertainments and dances were held for the benefit of the Red Cross; the Industrial Arts Schools cooperated with the Red Cross work and food conservation; and the manual training classes made boxes for packing local Red Cross material to be sent abroad. According to the report of the secretary of the Junior Red Cross, \$27,167.50 was invested in Liberty Bonds, War Savings Stamps, and Thrift Stamps.

The Junior Four Minute Men speaking contests were carried on successfully in connection with the work in English. The pupil who made the best speech became a Junior Four Minute Man and was awarded an appropriate certificate. The flag salute, patriotic songs, etc., were used daily. Flags were displayed at each school and in each classroom. Patriotic posters were displayed in every school.

"Lessons in Community and National Life" (prepared by the United States Bureau of Education and used in all grades above the third, including the high school) and thrift and war savings problems were incorporated into the work of the schools in such subjects as arithmetic, reading, history, English, geography, and current events. Examinations in the subject matter covered by Lessons in Community and National Life were given at the midyear and also at the end of the school year. It was the aim to correlate these problems with the different subjects in the schools the nature of which has inspired the pupils to better results.

Circulars have been issued to parents and guardians requesting that they cooperate with the schools in inspiring thrift and patriotism, and to teachers urging the importance of this kind of work.

The High School of Balboa continued its successful career, 89 pupils, including the class of 1917, having been graduated from it. The annual high-school play was given at the different Young Men's Christian Association clubhouses and at Camp Empire.

Manual training and household arts classes were carried on at Cristobal for the Cristobal and Gatun pupils.

SEWING WORK.

The business of providing suitable industrial training in the zone is difficult because of the scattered condition of its population. In order that results on a par with those of the modern industrial schools of the States may obtain, plans are under way for erecting and equipping buildings and providing instructors for each of the two terminal towns. When these are available, every child from the sixth grade on will share in the advantage that will come of having an institution of the most approved type. As the study of the conditions under which the courses of instruction must be developed continues, obstacles must be overcome; and new problems, unusual to teachers who are likely to be drawn to this locality, must be solved.

No better results could be achieved, and to no better use could the cooking department be put, than solving the new native produce question. This would be an ideal locality in which to conduct an agricultural center, with the boys in the fields producing the crops the year around and the girls cooking and studying food preparation from a scientific viewpoint.

Contrary to what might be expected, a big demand has been created for the pieces of furniture that add to the comfort and appearance of the homes, and altogether there seems to be no end to the possibilities of the industrial department. During the year much attention has been given to the organization of the manual training course in a way that would acquaint the students with the working methods of the shops. Satisfactory results also come of requiring them to give some time to the making of articles of equipment for the schools, the salient features being the promotion of responsibility for the welfare of the department, appreciation of expenditures for its upkeep, and the discouraging of selfishness. In this way employment is afforded those students who can not pay for, or who can not decide to make, furniture for themselves. As a result considerable school equipment of superior grade was turned out. Drawings, tracings, and blue prints for the proposed industrial school buildings at Balboa and Cristobal were made. There are other lines of industrial work rich in cultural and practical value to students and the community which should be given consideration.

The steady growth of the apprentice department has been noteworthy, as shown in the following table:

Enrollment according to trades and school grades.

Trades.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	11th.	12th.	Total.
Boilermakers.....		2	1	1		2	1			7
Blacksmiths.....				1		1				2
Cabinetmakers.....			1							1
Coppersmiths.....				1						1
Draftsmen.....					1					1
Electricians.....				1						1
Machinists.....			2	5	3	3	2		2	17
Molders.....			1	1						2
Pipetters.....		2			1		1			4

Physical training and athletics were continued in all the white schools. In almost all the white schools monthly fire drills, under the supervision of the Panama Canal Fire Department, were held.

The following table summarizes the comparative educational statistics for the years ending June 30, 1915, 1916, 1917, 1918:

Comparative statistics.

Items.	1915	1916	1917	1918
Number of school buildings.....	15	16	19	17
Buildings erected and converted.....	4	1	3	.....
Additional rooms constructed (additions to existing buildings).....	2	4	1	1
Number of employees in division.....	65	60	70	81
Number of supervisory force.....	1	1	2	3
Total expenditures (approximate).....	\$109,000	\$79,188.56	\$87,690	\$140,000
Estimated value of school property.....	\$120,000	\$110,000.00	\$100,000	\$550,000
Net enrollment:				
White schools.....	1,146	1,306	1,518	1,764
Colored schools.....	1,430	785	855	1,010
White and colored.....	2,576	2,149	2,373	2,774
Per capita expense of maintenance (approximate), based on net enrollment.....	\$42.31	\$32.66	\$36.66	\$50.83
Total days of attendance.....	283,988.5	258,244.0	295,697.0	350,619.0
White schools.....	157,537.0	183,206.0	209,782.0	239,527.5
Colored schools.....	126,451.5	75,038.0	85,915.0	111,091.5
Average daily attendance.....	1,762.2	1,501.4	1,709.2	1,963.2
White schools.....	1,006.3	1,065.1	1,212.6	1,322.9
Colored schools.....	755.9	436.3	496.6	640.3
Absence of teachers on account of sickness, days.....	217	161	234.5	312.5
Average monthly wages of teachers:				
White.....	\$98.78	\$98.84	\$109.52	\$125.58
Colored.....	\$59.75	\$60.56	\$65.00	\$67.67
Tuition collected.....	\$1,184.00	\$2,562.32	\$3,510.19	\$4,364.64

THE VIRGIN ISLANDS.

[FROM THE REPORT OF THE SCHOOL DIRECTOR FOR THE YEAR ENDING JUNE 30, 1918.]

There are only two classes of schools in the Virgin Islands—the public and those still maintained by the Roman Catholic Church. The public schools comprise those situated in the towns of Charlotte, Amalie, Frederiksted, and Christiansted, as well as the country schools formerly conducted by the Moravian Church, which for a short period were subsidized by the United States Government, but have now been formally transferred and become a part of the

public school system. The former Danish school director continued under our Government until July 1, 1917, when the present director assumed charge.

There are now 19 public schools organized in the Virgin Islands, with 80 teachers and about 2,500 children. There are 18 private schools maintained by the Roman Catholic Church, with 44 teachers and 1,364 children. The average salary received by the public school teachers is \$17.03 per month, having recently been increased from \$13.15. All teachers are natives. The director of schools for the islands states that his work has been greatly handicapped by reason of lack of books and equipment, practically none of which are available. An examination of the outline of the course of study shows the work planned almost entirely from the academic standpoint, industrial and vocational work receiving comparatively little attention. The survey of the actual school system has also shown clearly that to inaugurate a proper system of public education in the conditions of extreme poverty and ignorance generally prevailing, to purchase land, erect necessary buildings, provide furniture and other equipment, and engage teachers of satisfactory capacities, will require not less than \$300,000. Such a system, to be adequate and to effect the sorely needed improvements in the life of the people, must carry education beyond the elementary stages, so that what native talent there is in the people may have an opportunity to develop along agricultural, industrial, and business lines. It is also plainly essential that a normal school be established as early as possible, in order that native teachers may be developed under American instructors.

HAWAII.

By HENRY W. KINNEY, Superintendent.

During the past two years the school population of Hawaii has increased with considerably rapidity, the increase during the school year ending in June, 1917, being 6.9 per cent, while that for the school year ending June, 1918, was 6.4 per cent. During the same two years the pupils attending the public schools of the Territory have increased in number from 30,205 to 34,343.

To meet the needs occasioned by this increase a number of additional teachers have been employed. The total number of teachers in June, 1916, was 804, and in June, 1918, it was 967.

While the number of the teachers obtained from the Territorial Normal School has approximated 50 annually, it has been necessary to secure a greater number of additional teachers from the United States. The department has been fortunate in establishing close relations with the prominent universities and normal schools on the

Pacific coast, and, as a result, nearly all the teachers who have come to Hawaii from the United States during the past two years have been graduates of these institutions. It has been found advantageous to employ this method of securing teachers, as a better class is secured through the conscientious and responsible heads of institutions than could possibly be obtained through other means.

Some teachers are obtained from those who attend the summer school held annually in Honolulu, a four-week course open to those who pass the eighth-grade examination. From those who pass the summer-school examinations are drawn the teachers placed in the small schools of the remote regions, to which better-trained teachers refuse to go, owing to isolation and similar conditions. The department does not feel that this method of certification is satisfactory, owing to the manifest lack of both academic and professional preparation, but, until the normal school furnishes a greater number of graduates, it will hardly be possible to avoid employing this means. It is also hoped that the time is coming when the normal-school course may be made more exacting, but it seems as if the conditions resulting from the war, particularly the scarcity of qualified teachers, may postpone this step.

The department has, nevertheless, for the past two years been able to reduce greatly the percentage of teachers without adequate certification. This is due largely to the fact that the legislature of 1917 so increased the school appropriation as to raise teachers' salaries from 5 to 15 per cent.

The high schools in the Territory have increased quite rapidly, the number of such pupils in June, 1916, being 444 and in June, 1918, 625. The number of high-school teachers during the same period has increased from 32 to 42. The department is working toward establishing absolute uniformity in the high schools under its control, and, with this end in view, uniform textbooks were adopted in June, 1918. During the school year beginning September, 1918, 57 high-school teachers will be employed.

The normal school in Honolulu will be enlarged by the addition of a 12-room training school unit, and the number of teachers employed in the normal school will be 48, as against 32 employed in June, 1918, and 25 in June, 1916.

The most conspicuous feature of the Hawaiian school system is the diversity of nationalities found in the public schools. The summary showing the total is given below:

Enrollment in the Hawaiian schools, by nationalities.

Hawaiian.....	3, 216
Part-Hawaiian.....	3, 805

Enrollment in Hawaiian schools, by nationalities.

American.....	849
British.....	108
German.....	128
Portuguese.....	5,001
Japanese.....	15,101
Chinese.....	3,305
Porto Rican.....	1,082
Korean.....	400
Spanish.....	489
Russian.....	125
Filipino.....	626
Other foreigners.....	151
Total.....	34,848

In the schools no cognizance is taken of race, and it is surprising, especially to strangers, to note how very little influence the race problem has upon the school system. As a matter of fact, the department maintains that its task is the blending of its heterogeneous population into one harmonious and intelligent body politic.

During the past two years the emphasis placed on vocational training has continued, although it is, owing to war conditions, veering to some extent from the shop to the field and garden. Nearly all the large schools of the Territory now have well-equipped shops in charge of specially trained teachers. The schools had also conducted school and home gardens on a large scale, initiated even before the war began. This was an excellent foundation on which to take up the home production which the war placed upon the shoulders of the school communities. In no place in the Union is self-help, particularly as expressed in the home garden, so important as in Hawaii, which, by this means, is able to reduce greatly the quantity of imports from the mainland. As every ton of home-grown product means the saving of a 2,100-mile transportation from San Francisco, the children of Hawaii have had this matter particularly impressed upon them. There is probably not a school in the Territory which does not possess a garden, and practically all the school children who have attained suitable age have numerous home gardens as well. Thus, 132 schools have home gardens totaling 9,692

The number of school kitchens in which domestic science is taught by specially trained teachers and which serve 2½, 5, and 10 cent lunches to the school children is steadily increasing. While the war has taken away so many of the young men from the force that the instruction in the shops and possibly in agriculture will be seriously impaired, the kitchens will go on as usual. The vocational instructors are obliged at present to do classroom work as well as vocational work, owing mainly to the lack of funds in the vocational

appropriation, but it is the hope of the department that these teachers will soon be able to devote their entire time to strictly vocational work.

In this connection it may not be out of place to mention the fact that the public-school children have taken a very active and very productive interest in the activities occasioned more or less directly by the war. Stamps and liberty bonds have been bought in large quantities by pupils and teachers, and Red Cross units have been organized in practically all the schools having children large enough to furnish assistance of value. A large number of articles needed by the Red Cross have been prepared, and on the whole the war has undoubtedly done much toward fostering the spirit of united Americanism among these children of many races and nationalities.

The increase in school population has made it necessary to add materially to the school plant. While additional grounds have been annexed in a number of places, and while the legislature of 1917 made special appropriations for the enlargement of a number of the principal schools in Honolulu, the securing of additional areas will still be one of the principal problems of the department during the coming biennium.

While the counties remain in control of actual school construction, and the department has only the power of approval or disapproval of plans, this system of dual control has, in the past two years, been administered more efficiently than might be expected, owing to the cooperation which has existed between the various counties and the department. The task of construction has been simplified by the use of standard types of buildings. One of these, a bungalow type, has served well in the past where it was necessary to provide a serviceable building at the minimum of expense, but the department hopes that during the coming biennium it will be possible to abandon or at least improve this type. On the whole, the school buildings constructed during the past two years have been adequate and up to date as far as lighting and space, ventilation, seating capacity, etc., are concerned, but these buildings have been made extremely plain, owing to the lack of money, and it is to be hoped that the coming legislature will provide funds to build structures which will be more of a source of pride to the community and of inspiration for the pupils.

It should be added that the comparative lack of funds for school construction is due mainly to the tremendous increase in the cost of construction. The price of materials has advanced enormously, as it has elsewhere, but, in addition to this, Hawaii has had to contend with the tremendous advance in cost of ocean transportation, which is a serious matter, as practically all the material, such as lumber, hardware, cement, etc., has to be transported over 2,000 miles.

It is fortunate that it has been possible to improve the conditions in many of the country schools by the construction of dwellings for teachers, so that now practically every school in the Territory, with the exception of those located in Honolulu and Hilo, has on its grounds cottages for the teachers. This has made it possible to secure in many of the country schools a class of teachers superior to that employed when no adequate lodging facilities existed. In some of the counties it has been possible to have furniture for these cottages manufactured in the school carpenter shops, and it is hoped that during the next biennium all the teachers' cottages will be provided, at least to a very great extent, with serviceable furniture.

The public schools are notoriously lacking in toilet facilities, and the providing of such will be one of the problems of the next biennium.

The school for the care of defectives has increased in size from 1 teacher and 13 pupils in June, 1916, to 6 teachers and probably about 50 pupils in September, 1918. The department is now looking for a site in which to establish an institution permanently, and there is available an appropriation of \$35,000 for teachers and buildings for the present biennium. While at present deaf, dumb, blind, and mentally defective children are taught in the same institution, it will undoubtedly be advisable, when the number of pupils justifies the step, to divide the present institution into two separate units—one for the mentally defective and another for those having other defects. At present only pupils are taught who can come to school alone or who can be reached by means of an automobile provided for their transportation. The institution should, however, be provided with facilities for boarding children from the other islands.

A school for tubercular children exists in Honolulu, and another may be established on one of the other islands in the near future.

Several ungraded rooms for the instruction of backward children have been provided in Honolulu, and during the coming term an experiment will be made whereby a coach will be provided to instruct children who are backward in one or two subjects in the afternoons and on Saturdays. If this plan is found successful, it will be more generally used.

Medical inspection in the schools has been extended. This work is under the control of the Territorial board of health.

By means of a fund raised by private subscription, it has been possible to feed a number of poorly nourished children, and in some schools careful records have been made of weights and measurements.

A new primer, particularly adapted to the needs of the pupils of this Territory, has been compiled by a committee of teachers and is now in the process of publication by the printing class of the normal school. These books are to be issued to the schools as sup-

plementary readers until it has been determined whether they are altogether suitable for general adoption.

A special examination of the German textbooks used in the high schools has been made, and several which were considered as being of a questionable character have been eliminated.

All teachers in the public-school service have been required to sign the following pledge:

The principal function of the public schools of the Territory of Hawaii is to produce loyal American citizens.

Good American citizenship is more important than scholarship.

The Department expects all its teachers to express themselves positively in teaching loyal Americanism.

Will you do this?

Answer this question "Yes" or "No."

Answer -----

Signature -----

The attendance in the public schools continues to be extraordinarily good, as the following record will show:

	Per cent.
June, 1916-----	93.4
June, 1917-----	93.8
June, 1918-----	93.8

The wonderfully fine climate of the Hawaiian Islands is, to a very great extent, responsible for this condition.

The outlook of the school year beginning September 1, 1918, is rather discouraging, owing to several conditions which have arisen on account of the war. A number of the male teachers have entered the Army. This deprives the department of many of its best young principals, and will materially hamper the work in its carpenter shops and along agricultural lines. Thus it will be necessary to have vocational instructors who will visit one school one day and another the next, whereas, in the past, it has been possible to have one instructor for each large school. A number of the young women in the service have married officers of the Regular Army garrisons in Hawaii, and have left for the mainland with the exodus of regular troops. A number of married women teaching in the schools in the outside districts have left for Honolulu, owing to the fact that their husbands have been drafted in the regiments consisting of local men, which have all been stationed on the Island of Oahu. As a consequence, the number of teachers leaving the service has been unusually large, and the difficulty of securing others from the United States to take their places has been greater than usual. A further difficulty has arisen from the fact that a number of the steamers plying between San Francisco and the islands have been withdrawn from the service, and teachers wishing to come to the islands have found it very difficult to secure transportation. Despite these ob-

stacles the department expects to bring about 150 teachers from the United States, to which number should be added 56 graduates of the Honolulu Normal School, who will also enter the service this year.

THE PHILIPPINE PUBLIC-SCHOOL SYSTEM.

By W. W. MARQUARDT, Director of Education.

ORGANIZATION OF THE BUREAU OF EDUCATION.

During the school years 1916-17 and 1917-18 no important change took place in the organization of the public-school system. The system is a highly centralized one, the director having charge of all public schools in the islands. In certain matters of policy his action is subject to the approval of the secretary of public instruction. Besides the director, there is an assistant director, a second assistant director, a general office force, and a field force.

The work of the general office is in charge of the chiefs of the following divisions: Academic, accounting, industrial, property, and records.

In the field the division superintendent of schools is directly responsible to the director of education. He supervises the schools of a Province, and under him are usually a supervisor of academic instruction, one or more supervisors of industrial instruction, a high-school principal, and several supervising teachers.

The division is divided into supervising districts, each in charge of a supervising teacher who has control of primary and intermediate schools within his district. There are 48 divisions and more than 300 supervising districts.

FACTORS OF SUCCESS.

Whatever success has been achieved in the Philippine public-school system has been due largely to the fact that a centralized system has been established under the control of professional educators. The future development and progress of the public schools will depend upon whether or not this policy is continued.

SCHOOLS AND PUPILS.

There was no increase in the number of primary schools and a very slight increase in the number of secondary schools, whereas the number of intermediate schools grew rapidly because intermediate schools are supported almost entirely by tuition fees. If inter-

mediate schools had depended upon governmental revenues, no increase could have been made.

Increase in school attendance.

Attendance.	Primary.	Intermediate.	Secondary.	Total.
Schools:				
1917-18.....	4,276	428	48	4,747
1916-17.....	4,288	368	46	4,702
Annual enrollment:				
1917-18.....	592,563	64,306	14,639	671,398
1916-17.....	607,682	56,884	11,432	675,998
Average monthly enrollment:				
1917-18.....	499,966	58,592	12,897	569,475
1916-17.....	507,226	56,306	10,093	569,625
Average daily attendance:				
1917-18.....	465,754	53,232	12,301	531,377
1916-17.....	457,383	47,230	9,650	514,263
Percentage of attendance:				
1917-18 per cent.....	91	94	96	92
1916-17 per cent.....	90	94	96	91

The annual enrollment for 1917-18 was a little less than for 1916-17; the average monthly enrollment, slightly larger; the average daily attendance, 7,114 greater; and the percentage of attendance, larger. Although the percentage of attendance increased, the fact that 24 per cent of the pupils dropped out of school during 1916-17 can not be overlooked. In other words, only 76 per cent of the pupils enrolled during the year were eligible for promotion at the close of the year, in March. During the past five years there has been an increase in the percentage of pupils held in the schools throughout the year, but during the last two years the increase has been slight. Taking into consideration the fact that there is no compulsory attendance law in the Philippines, these data are not discouraging. It is unquestionably true that the public schools have cultivated a desire for education, as is evidenced by the demand for schools and the increased regularity of attendance.

One encouraging feature of attendance figures is that the proportion of girls to boys in the public schools, especially in the higher grades, is increasing. The oriental attitude toward education of women is being gradually overcome, and at present nearly 40 per cent of the total number of pupils in school are girls. The greatest difficulty has been experienced in keeping girls in school after they finish the primary grades and even until they finish the primary grades. Statistics show, however, that the proportion of girls in higher grades is gradually increasing. Comparison of figures of attendance of boys and girls in intermediate grades for the school years 1910-11 and 1916-17 shows that the increase in attendance of boys was 82 per cent, while that of girls was 222 per cent. In the high schools the figures for boys was 250 per cent, and for girls 267 per cent. These data indicate that an increasing number of girls are

no longer content with a primary education. With the introduction of the new secondary course in housekeeping and household arts, it is believed that a proportionate increase in the number of girls in the high schools will take place.

Extension of school facilities among natives has gone on rapidly. The Philippine Legislature was liberal in the appropriation of insular funds for this purpose. Consequently, the number of schools for natives and the attendance on them increased greatly. Special attention was given to adapting the instruction to the varying needs of these people. Agricultural training was emphasized in practically all new schools opened for them.

At present less than one-half of the school population of the Philippine Islands enjoy educational advantages, and no adequate remedy for this deplorable condition is possible without making provision for increased sources of school revenue. For several years the director of education has tried to impress upon the Philippine Legislature the great need for legislation which would provide increased school revenue. Although it is believed that such legislation would have the support of the Filipino people, and although most of the legislators proclaim their support of the public schools, no remedial legislation has yet been secured. During the 1916-17 and the 1917-18 session of the legislature the director of education presented certain bills and conducted press campaigns in an endeavor to arouse public opinion to support them. The bills proposed were permissive and not mandatory, and were designed to give provincial and municipal governments discretion as to whether they should levy increased taxation in the form of an additional rate upon land values or of an increase in poll tax, or both. Nothing, however, was accomplished. In view of the present prosperous condition of the Philippine Islands, there is no reason why legislation should not be enacted to provide school funds sufficient greatly to extend the system of primary schools.

Since the above words were written, they have been fulfilled to a remarkable degree. In February, 1919, 30,000,000 pesos (\$15,000,000) was appropriated by the Philippine Legislature to extend free education to all the children in the islands.

Of the effects of this, Acting Gov. Gen. Yeater says, in his report:

This act is of prime importance, not only because it provides funds for a term of years sufficient to extend a primary education of seven grades to all the children of school age, but also because it enables the [Philippine] bureau of education to prepare and carry into execution a complete and systematic development of the existing excellent educational plan, which lacked only extension over the entire field. Furthermore, it is a means of incalculable value for the welfare of the Filipino people, since it will banish illiteracy, establish permanently English as the common language of the land, afford a

firm foundation for democratic institutions, and insure order and stability to the insular government.

The adoption of this thoroughly American educational measure will tend greatly to lift the moral responsibility incumbent on the United States to secure a firm and orderly government, and aside from the differences of opinion which may have existed among American statesmen in the past it has been advocated by all Americans from the beginning of the occupation that universal free education of the masses should be an essential characteristic of our national policy in the Philippines. Inasmuch as when Congress considered paragraph 2, the acts of July 1, 19, and of August 29, 1916, much discussion was had about the political capacity of the Philippines, I feel that I discharge a duty of conscience to call your attention to the fact that this enlightened measure was passed by the legislative department of the government, which, as you know, is composed entirely of Filipinos. By this law of universal free education the all-Philippine Legislature in the last two years has provided for doubling the quantity of the educational work effected in almost two decades of previous American occupation. Under the financial support previously given, it was necessary to turn away from the doors of the schoolhouse one-half of all the children of the islands. In five years all the children of the land will receive educational advantages. Besides this, the salaries of all municipal teachers will be increased 30 per cent.

In addition, I direct attention to the fact that at the session of 1917-18 two normal schools were established, and two more were established at the session just adjourned, all to be located by the secretary of public instruction, making, with two already existing, six such schools; also, four agricultural schools were established in the session of 1917-18, and three more this year, making 17 in all. The college of agriculture has just had its appropriation largely increased, and an experiment station has been established in connection with it. The appropriation of this year for the university far exceeds any former appropriation. In addition to all this, the appropriation to the bureau of education for this current calendar year exceeds by 3,000,000 pesos any former appropriation. Furthermore, legislative appropriation was made for pensioning 150 young men and women to be trained as specialists in the colleges of America and elsewhere, and they are expected to sail in August next.

The heroic and unselfish work of American teachers, many of whom lost life or health, deserves and should receive the very highest praise, but it would be particularly unjust and unfair for me as head of the department of public instruction not to recognize and make known the work of Filipinos in this regard. Of the present teaching force of over 14,000, less than 3 per cent are Americans. The number of American teachers is gradually growing less as Filipino teachers are trained to take the important positions which they hold.

PHYSICAL EQUIPMENT OF THE PUBLIC SCHOOLS.

The past two years marked great improvement in the equipment of public schools, especially in regard to school furniture. There was also an increase in the number of school sites and school buildings.

The number of school sites for 1916 was 2,623, and for 1918, 2,824. Considerably more than one-half of these sites are first class, according to the classification below.

A. FIRST-CLASS SITES.

1. A minimum area of one-half hectare for every 200 pupils of the annual enrollment or fraction thereof up to 2 hectares for 800 pupils or more is required.
2. The site must be well located and easily accessible.
3. The site must be well drained and sanitary.
4. The topography must be such that a satisfactory athletic field can be laid out.
5. The soil must be suitable for gardening.

B. SECOND-CLASS SITES.

1. A minimum of one-fourth hectare for every 200 pupils of the annual enrollment or fraction thereof up to 1 hectare for 800 pupils or more is required.
2. An insanitary site or one entirely unfit for gardening and athletics should not be considered second class.

C. THIRD-CLASS SITES.

1. All other sites come under this head.

Conditions brought about by the World War have greatly increased the cost of construction of all types of buildings, especially of the standard reinforced concrete structure, the type of permanent building commonly erected for school purposes. Construction of this type of building has continued, however, because relief from high costs of materials can scarcely be expected for some years, and the additional prosperity tends to lessen the burden of increased cost of construction. In 1917, 840 buildings, 448 of which were of reinforced concrete, were classed as permanent, while in 1916 only 757 were so classified.

The greatest advance in physical conditions during the last two years took place in the equipment of schools with suitable school desks and other furniture. At the close of the school year 1917-18 there were comparatively few Provinces in which any large proportion of pupils were without desks. In the campaign to provide each pupil with a desk of approved type, the provincial trade schools and school shops rendered valuable service and in addition constructed teachers' tables, bookcases, and other school furniture.

TRAINING AND WELFARE OF TEACHERS.

Facilities for training teachers both before and after they enter the teaching service were materially increased during the past two years. Attendance in the higher classes of the Philippine Normal School greatly increased, and the total number of graduates from this institution for the last three years is greater than the total number of graduates for all preceding years.

The Philippine School of Arts and Trades continued to turn out teachers of woodworking and mechanical drawing, and the Central

Luzon Agricultural School sent out a large number of teachers to agricultural, farm, and settlement-farm schools. These teachers were scattered throughout the archipelago, but nearly 500 of them went to the Department of Mindanao and Sulu, where many new settlement-farm schools have been opened. This body of teachers represented practically every Province in the Philippine Islands; and their harmonious cooperation is a significant development in education and in the problem of the final unification and nationalization of the people of these islands.

At the beginning of the school year 1916-17 a four-year normal course was organized in five large provincial high schools. At the same time the course of study in the Philippine Normal School was revised so that only students who had completed the first year of the regular high-school course were eligible for entrance. The Philippine Normal School now gives a special one-year course for supervising teachers and principals in addition to its courses in academic, industrial, domestic science, and physical education. In 1917 a two-year normal course was outlined and put into effect in two or three high schools where the complete secondary course was not offered.

The legislature in 1917 appropriated \$150,000 for the establishment of two new normal schools, one in northern Luzon and one in the Visayas. Large sites for these schools have been secured and construction is expected to begin soon.

The college of education of the University of the Philippines now has a larger attendance than ever and is supplying teachers for secondary work. It is evident, however, that this institution can do little toward supplying enough secondary teachers when the average attendance of secondary students is more than 12,000 and when the yearly increase is so great that the attendance almost doubles every three years. At present, the problem of securing suitable secondary teachers is acute. Due to the war it is impossible and undesirable to get young men from the United States; and while a certain number of women teachers have been secured, not enough are now (August, 1918) available properly to supply the teaching force for the secondary schools.

A rather complete system for the training of teachers in service has been developed, because a large proportion of teachers have had little or no actual training in normals or other schools for the preparation of teachers. During each of the school years 1916-17 and 1917-18 about 800 selected teachers from all divisions attended for a five-weeks' period the teachers' vacation assembly in Manila, where primary and intermediate methods and the latest developments in industrial work were emphasized. Upon returning to their divisions the teachers who attended the assembly in Manila became instructors

for four weeks in division normal institutes for division teachers. The assembly in Manila, and the division institutes which followed, were of the utmost importance in the improvement of the character of academic and industrial instruction. A professional reading course for all intermediate teachers has been outlined for the present school year.

Other agencies used for improving the quality of teachers are: Visiting days, which have become a feature of school work in practically all divisions, and teachers' meetings of various kinds.

The teachers' vacation assembly, held in Baguio during April and May of each year and attended by American and Filipino teachers and supervisory officers, is also an important factor in improving school work. Conferences lasting a week each were held (1) for teachers and principals of intermediate and high schools, (2) for supervising teachers, and (3) for industrial teachers. Following these conferences was the convention of division superintendents.

Classes for Filipino supervising teachers were also held in Baguio. In 1918 for the first time model classes were conducted in connection with these classes. Model classes henceforth will be the most important feature of the teachers' vacation assembly in Manila and of the division institutes.

A determined effort has been made to increase salaries of teachers of all grades. This has been merely a matter of justice, since the cost of living has increased greatly. The salary increases which the director was able to give teachers on the insular pay roll and the increases which division superintendents were able to give municipal teachers are not considered sufficient compensation for the great majority of teachers in the service.

During the past two years the matter of raising salaries of municipal teachers was taken up with division superintendents with the idea of making the minimum salary \$10 per month and with the intention of increasing this to \$12.50 a month at the earliest possible date. A \$10 minimum salary has been fixed in nearly all divisions and the legislature will be requested to appropriate funds to make a \$12.50 minimum salary effective. The average salary of municipal teachers in March, 1916, was \$11.44, and in March, 1917, it was \$11.99. In January, 1918, the average was about \$18.50. Returns for March, 1918, show the following in regard to salaries of municipal teachers:

Percentages of teachers receiving various monthly salaries:

	Per cent.
Less than \$10.00.....	12
\$10.00 to \$12.49.....	51
\$12.50 to \$14.99.....	14
\$15.00 to \$17.49.....	9
\$17.50 to \$19.99.....	4
\$20.00 to \$22.49.....	5

All regular teachers whether municipal or insular receive salaries for 12 months a year. The average salary of insular teachers has been increased from a little more than \$27.50, in 1916, to something more than \$30 per month at the present time. At the convention of division superintendents in May, 1918, the following salary schedule was recommended for municipal teachers:

Minimum salary.....	\$12. 50
30 per cent of teachers.....	\$12. 50 to \$14. 99
30 per cent of teachers.....	\$15. 00 to \$17. 49
15 per cent of teachers.....	\$17. 50 to \$19. 99
15 per cent of teachers.....	\$20. 00 to \$22. 49
5 per cent of teachers.....	\$22. 50 to \$24. 99
5 per cent of teachers.....	\$25. 00 or more.

While this schedule is not ideal, it sets an aim much in advance of that which can be attained with sources of school revenue as they now are.

TEACHERS AND THEIR WORK.

The number of teachers on duty in March of each of the last three years is shown below:

Teachers.	March—		
	1916	1917	1918
Americans.....	506	477	411
Insular.....	1, 379	1, 391	1, 399
Municipal.....	9, 138	10, 336	11, 484
Apprentice.....	40	99	2
Total.....	10, 963	12, 303	13, 296

The number of American teachers has decreased nearly 100, the number of insular teachers has increased 110, and the number of municipal teachers has increased at the rate of more than 1,000 a year.

The following table shows the number of teachers assigned to various duties in March of each of the last three years:

Teachers.	March—		
	1916	1917	1918
Primary.....	8, 495	9, 585	10, 447
Intermediate.....	1, 104	1, 339	1, 896
Secondary.....	231	268	343
Industrial instruction and supervision.....	800	891	213
General supervision.....	303	320	340

Only two-tenths of 1 per cent of American teachers on duty in 1917 were engaged in primary work, and they were teaching in

schools attended by American children in Manila and at Army posts. Five per cent of intermediate teachers in 1917 were Americans, a decrease of more than 4 per cent since 1916. A little more than three-fourths of the teachers engaged in secondary work were Americans, and 35 per cent of the teachers doing supervisory work were Americans. The time is rapidly coming when Americans will be employed only in high schools, as provincial supervisors, and as division superintendents. Very few supervising teachers now are Americans, and all supervising teachers will be Filipinos in the near future except in a very limited number of cases.

COURSES OF STUDY.

An important change in the courses of study was the introduction of new courses in secondary schools. The primary course of study has remained practically unchanged. Few changes were made in intermediate courses, where, however, some interesting developments as regards distribution of pupils among the courses took place. The enrollment in intermediate grades by courses for March of the last three years is shown below:

Enrollment.	March—		
	1916	1917	1918
General.....	23,139	30,399	35,999
Teaching.....	7,412	3,436	1,861
Trades.....	3,582	3,610	3,009
Farming.....	1,380	1,062	1,731
Housekeeping and household arts.....	5,917	7,585	9,449

These figures show that the intermediate teaching course is dead. Practically no pupils were enrolled in this course at the beginning of the school year 1918-19. Teachers of higher attainments than the completion of an intermediate course are now available in most provinces. The table shows a large increase in the number of girls enrolling in housekeeping and household arts and a small increase in enrollment of boys in the farming course. A greater increase is expected in the farming course.

In 1918 new secondary courses were outlined. The general course and the four-year normal course were revised. Courses in housekeeping and household arts, in commerce, and in agriculture were outlined for the first time. It is not expected that these new courses will be used in all provincial high schools, but they will be given in several of the larger schools where the number of pupils and the equipment make a diversification in courses feasible.

In addition to the courses offered in provincial high schools, there are six insular schools—the Philippine Normal School, the Philip-

pine School of Arts and Trades, the Philippine School of Commerce, the Philippine Nautical School, the School for the Deaf and the Blind, and the Central Luzon Agricultural School—which offer special courses. The work of the Philippine Normal School has already been mentioned, as has also the fact that the Philippine School of Arts and Trades and the Central Luzon Agricultural School give courses of training for industrial and agricultural teachers. The Philippine School of Arts and Trades also gives courses in woodworking, ironworking, electrical wiring, plumbing, automobile operation, preparatory engineering, and surveying. The Philippine School of Commerce gives courses in bookkeeping, stenography, typewriting, and commerce. The Philippine Nautical School gives a two-year course of training to fit young men to become officers on inter-island vessels and trans-Pacific steamers. The Central Luzon Agricultural School offers, in addition to its teaching course, a course in farm management and one in the operation of steam and gas engines.

PHYSICAL EDUCATION AND MEDICAL AND DENTAL INSPECTION.

The war has directed attention to the necessity of conserving human life and of increasing efficiency. For years practically all students in Philippine public schools have engaged in some form of physical exercise, the effects of which upon the physical development of the Filipino people are distinctly apparent. During 1917-18 military training was prescribed for all boys in high schools and physical education was given a more definite place in all secondary courses of study. A complete course in physical education for primary, intermediate, and secondary grades is being prepared. When this is published, instruction will be more systematic and uniform.

Medical and dental inspection of pupils is in the hands of the Philippine Health Service, which has done valuable work along this line. It did not give to these matters all the attention needed, however, because of lack of sufficient personnel. Medical inspection has been quite general, but dental inspection has been limited to a few places. During the past year a letter was addressed to division superintendents requesting them to take up with provincial boards the matter of providing more adequate medical and dental inspection in the public schools and of securing additional nurses for public-school service. As a result increased attention has been given these matters, but conditions are yet far from satisfactory, and will remain so until there are several provincial nurses in each division—at least one municipal nurse in each large municipality—and an adequate corps of physicians to examine pupils for defects and diseases.

WAR ACTIVITIES OF THE BUREAU OF EDUCATION.

The public schools entered the food-production campaign with enthusiasm, and as a consequence the cultivated area of school and home gardens and the production of food doubled. Thus the Philippine Islands helped to conserve food for the allied forces, and in addition many Filipinos enjoyed a more varied diet.

Red Cross work was done in the schools in 1917, but this work is now being undertaken on a larger scale. In the public schools bandages for wounded soldiers and clothing for French and Belgian refugee children are being made in large numbers. A Red Cross membership campaign just ended has resulted in the enrollment of more than 12,000 teachers as senior members of the Red Cross Society, and more than 200,000 pupils as junior members. During the teachers' vacation assembly in Baguio a Red Cross drive on May 7, 1918, resulted in raising \$2,500.

American and Filipino teachers and other employees have subscribed liberally for Liberty Loan bonds. Employees of the bureau of education purchased more than \$60,000 worth of Liberty Loan bonds of the third issue, in addition to their subscriptions to the first and second issues.

ACADEMIC INSTRUCTION.

A great improvement in academic instruction took place during 1916-17 and 1917-18. This was largely a result of better facilities for training teachers and closer and more effective supervision. The appointment of a larger number of academic supervisors helped to make supervision much more satisfactory. However, much variation in efficiency of instruction still exists.

In academic instruction increased efficiency—the main factor in the promotion of pupils—was shown by the average increase of 6 per cent in promotions in all grades for 1916-17 over 1915-16. As this increase was not due to any lowering of standards, it was significant.

INDUSTRIAL INSTRUCTION.

Industrial instruction occupies an important place in the courses of study. About 17 per cent of the total time in primary grades and 18 per cent of the total time in the general intermediate course is devoted to this form of instruction. In special intermediate courses and in special types of primary schools about half of the time is devoted to industrial work. The following data give an idea of the value of the commercial output of the public schools for the school year 1917-18: Embroideries, \$12,500; laces, \$9,000; crochet, \$4,500;

sewing, \$28,000; cooking, \$3,500; basketry, \$33,000; hats, \$1,500; products of loom weaving, \$3,500; bamboo-rattan furniture, \$3,000. A large number of other articles were made in small quantities.

The value of the gross output of trade schools during the last three years follows: For 1915, \$61,418.81; for 1916, \$79,132.04; for 1917, \$106,485.12. These figures include cost of material, and therefore do not give a definite idea of the total value of work done by pupils.

Due to war conditions the total value of embroideries exported from the Philippines increased from \$162,456 in 1914 to \$1,561,214.50 for the fiscal year July 1, 1916 to June 30, 1917. A part of this increase was undoubtedly made possible by instruction given in the public schools.

War conditions have not been favorable for the production of all commercial articles in the public schools, however. The great increase in trans-Pacific freight rates has made it unprofitable to export articles the value of which is not relatively great as compared with weight and bulk. Excessive cost of transportation has thus made it necessary to abandon the making of larger and more bulky articles.

The bureau of education, through traveling industrial teachers, has fostered household centers, the members of which engaged in the making of embroidery, lace, and other articles of handicraft. The bureau of education gave up the supervision of these centers as soon as they were developed to a point where they could deal directly with business houses.

During the last year the value of school production of articles of handicraft was \$86,270 and the value of production of household centers was \$11,782. Articles to the value of \$92,200 were sold through the general sales department of the bureau of education, and local sales amounted to \$5,852.

AGRICULTURAL INSTRUCTION.

Facilities for agricultural instruction were developed and extended. The number of agricultural, farm, and settlement farm schools increased from 79 for the year 1915-16 to 138 for 1917-18. Of the increase, 9 were agricultural schools; 12, farm schools; and 117, settlement farm schools. During the same period enrollment in these schools nearly doubled, the cultivated area doubled, and the total value of production much more than doubled, having been more than \$45,000 for 1917-18.

Agricultural clubs for boys and girls were organized in 1916-17. Club projects now include gardening, cooking, chicken and hog raising, and fruit growing. At the end of the year 1916-17 club mem-

bers owned 31,538 chickens and 2,247 hogs. During 1917-18 the number of clubs increased to 1,136 and at the end of the year the number of chickens and hogs owned was 58,458 and 2,744, respectively.

An organization pamphlet and 120 lesson leaflets are now being distributed to members, and these help to direct the work and make it more effective. The work of these clubs has an important bearing upon the educational and economic development of the country. This is an agricultural country, and everything that tends to increase agricultural production brings nearer the time when all, instead of one-half, of Filipino children may enjoy educational privileges.

School and home gardens have done much to provide a varied diet and to improve living conditions. The following table shows the number of school and home gardens for the last three school years:

School and home gardens.

Gardens.	1915-16	1916-17	1917-18
School gardens.....	3,545	3,960	4,023
Home gardens.....	48,432	54,656	105,668

Garden days, 1,272 of which were held in 1917-18, aroused interest in home gardening. At these celebrations pupils and farmers not only exhibited garden products, but exhibited domestic animals as well. The bureaus of agriculture, forestry, health, and constabulary cooperated with the bureau of education in furnishing exhibits for some of the garden days. During each of the last three years approximately 100,000 shade and fruit trees were distributed to the public through public-school nurseries.

SCHOOL LIBRARIES.

In 1915 a movement was started for the establishment and development of better school libraries. The table below shows the excellent progress made:

School libraries.

	1915	1916	1917
Number of school libraries.....	320	751	1,064
Number of books acquired.....	8,888	21,020	42,674
Number of outsiders using school libraries.....	1,590	3,641	10,308

The increase in the number of outsiders using the libraries was perhaps more important than the large increase in the number of libraries and the number of books acquired. The school library prob-

lem is far from being solved when the library is established and filled with suitable books. The reading habit among pupils and outsiders must be formed. Proper use of libraries is now being emphasized in public-school work. A large number of outsiders using school libraries were once pupils in the public schools, where they undoubtedly cultivated the desire for reading.

An important step toward inculcating the reading habit was taken in 1917 when the bureau of education started the distribution twice a month of 40,000 copies of a small four-page publication known as "The Philippine News Review," which contains current events of the Philippines and of the world. In many localities this was practically the only available source of important news. The number of copies distributed was increased to 60,000 in 1918.

All secondary and a large majority of intermediate schools now have libraries. The establishment of libraries in larger primary schools is going forward rapidly. These libraries furnish interesting reading for pupils and provide professional magazines for teachers.

The following parts of Bulletin No. 44, Libraries for Philippine Public Schools, were issued in mimeographed form in 1916, 1917, and 1918: Books and Pictures for Primary Grades, Books and Pictures for Intermediate Grades, Supplementary List of Books for Primary and Intermediate Grades, Supplementary List of Books for Intermediate Grades, Supplementary Reading in Geography, Books and Pictures for Secondary Schools.

A five-weeks course in library training was offered in 1917 and 1918 at the teachers' vacation assembly in Manila, and a similar course was given at normal institutes. The new one-year course of study at the Philippine Normal School for supervising teachers and principals gives training in school library management. Division superintendents have been requested to make plans to provide each school with a teacher-librarian.

THE INFLUENCE OF THE PHILIPPINE PUBLIC-SCHOOL SYSTEM IN THE FAR EAST.

During the years 1916-17 and 1917-18 the public schools were visited by a large number of delegations from China, who studied the school system thoroughly. A commission from Formosa and a number of visitors from Japan showed much interest in Philippine public schools. Constant requests were received for publications from such countries as China, Siam, India, Egypt, Burma, Hawaii, Japan, Chosen, French Indo-China, Ceylon, Cuba, Porto Rico, Hayti, Australia, Straits Settlements, Federated Malay States, Papua, Java, Sumatra, Formosa, Newfoundland, Chile, New Zealand, and Fiji.

During this period Filipino teachers began to render service in foreign countries. Two industrial teachers were sent to Guam to

undertake the development of industrial instruction there along the same lines followed in the Philippines. A Filipino teacher of industrial work, who was furnished the government of the Federated Malay States, achieved marked success in the Malay Training College for Teachers at Malacca. Two Filipino teachers were employed as instructors in English in the mission schools of Penang.

FINANCIAL SUPPORT OF THE PUBLIC SCHOOLS.

The following table gives insular, provincial, and municipal expenditures for education from 1914 to 1916. No later data are available.

Expenditures for education.

Year.	Insular.		Provincial.	Municipal.	Total.
	Instruction and administration.	Public works.			
1914.....	\$2,000,027.99	\$254,839.01	\$236,269.15	\$1,151,652.17	\$3,682,788.31
1915.....	2,087,053.27	365,594.81	221,583.48	1,082,406.85	3,757,638.01
1916.....	2,161,850.55	191,998.44	231,921.88	1,197,393.90	3,783,173.77

During these years insular, provincial, and municipal expenditures varied a little. The total of insular appropriations was between two and two and one-half million dollars; provincial expenditures amounted to about two hundred and twenty-five thousand dollars; and municipal expenditures to more than one million dollars.

Taking into consideration the increase in prices of practically all commodities, it is evident that appropriations have not been sufficient to provide for extension of public education. In fact, the number of primary schools has decreased slightly.

When the bureau of education was organized, the insular government undertook a large share of the support of public schools. At that time, however, it was thought that provincial and municipal governments would gradually assume larger responsibilities for the maintenance and support of schools. Such has not been the case, however, and provincial and municipal expenditures for public schools show relatively small increases.

For several years permissive legislation, which would permit provinces and municipalities to raise increased school revenues by taxation, has been proposed by the bureau of education to the Philippine Legislature, but favorable action has not been secured. Such action is necessary if there is to be any further extension of the public-school system. If secondary and agricultural education in the provinces is to be placed upon a firm basis, a fixed provincial school fund is necessary, and it should be not less than 10 per cent of the total provincial revenue.

WHAT THE BUREAU OF EDUCATION STANDS FOR.

The bureau of education advocates:

1. For every boy and girl a minimum educational opportunity, consisting of free attendance upon at least the four grades of the primary course.
2. For every primary graduate the opportunity to attend an intermediate school free.
3. For every intermediate graduate the opportunity to attend a secondary school free.
4. The rapid extension of opportunities to secure instruction in practical farming, especially in the type of institution known as the agricultural school.
5. English as the language of instruction, since it can, by becoming the common medium of communication, advance national solidarity and provide the best conditions for individual and national progress.
6. Physical education for all pupils as a means of developing both physical and moral strength.
7. Industrial instruction as an aid to economic development and to character.
8. A school system made thoroughly democratic by the early abolition of all voluntary contribution and tuition schools. The placing of these schools upon a business-like basis through the enactment of legislation providing increased school revenues.
9. Permissive taxation legislation which will grant provincial and municipal governments greater autonomy and will make possible the extension and improvement of instruction in all grades.
10. Liberal appropriations for school purposes by the insular government, with special provision for buildings and special types of schools.
11. Salaries for teachers and supervising officers in keeping with the educational and professional attainments required and the supreme significance of their service to the community.
12. The recognition of school supervision and teaching as professions demanding technical training and skill in no way inferior to those required in other professions.
13. Professional control of the school system by educators as the only means of retaining the confidence and support of the people and of putting into effect modern principles of business efficiency as applied to educational administration.
14. Provision by the government for the adequate training of librarians to take charge of school and other libraries and thus to contribute to educational progress through the formation of the reading habit by pupils and people.
15. Sites, buildings, and equipment suitable for conducting all school activities (physical, social, academic, industrial) in a way to achieve results worth while in each.

EDUCATION IN ALASKA.

1. ALASKA NATIVE SCHOOL SERVICE.¹

The schools for native children in Alaska are under the supervision of the Bureau of Education of the Interior Department, being

¹ Summary of the report of Gov. Thos. Riggs, Jr., for 1918, pp. 10-13.

directly supervised by five district superintendents in Alaska, responsible to the chief of the Alaska Division of the Bureau of Education, with headquarters in Seattle. For the past year these schools numbered 71, two of which were summer schools having a total enrollment of approximately 3,500.

The majority of these schools are located in native villages, each of which is usually in charge of a man and wife. On account of the variety of the work in connection with a native school the Bureau of Education finds it advantageous to appoint married people. Not only must these Federal employees be capable of teaching school, but they must also possess practical abilities which will enable them to promote native industries, domestic arts, personal hygiene, social welfare, and in general improve the living conditions of the adult as well as the school population of the village and the vicinity.

The schoolroom and living quarters of the employees are usually under one roof, forming a center from which quite often there issues the only uplifting and civilizing influence in that community.

There has been and still is an attitude of aloofness toward the native population by the white people of Alaska which is not conducive to rapid advancement by the former race. Quite often the bureau employees and the missionaries are the only whites who seem to have any interest in the natives' welfare. The native Alaskans are self-reliant, law-abiding, and honest, and the only help they have had from the Federal Government is the establishment of schools in the larger villages, a little medical relief, and the introduction of reindeer among the northern and western tribes. This assistance has been given them through the organization of the Alaska Division of the Bureau of Education.

Because of the fact that the native population is very scattered and the villages have rarely over 200 or 300 inhabitants, and generally much less than that, the bureau's educational efforts have been rather hampered. Were the natives located in large settlements of 500 or more, their education, medical relief, and industrial advancement would be simplified considerably. To this end the bureau has gradually been working toward attracting the natives to selected sections of land which have been reserved for the exclusive use of the natives and the bureau. These reserves are not to be confused with the Indian reservations of the States as they in no way interfere with the liberties and freedom of the native inhabitants thereon. By establishing industries on these reserves which will give the natives work the year around, schools that have more than the elementary grades, and by placing the care of their physical welfare in the hands of trained medical employees, the bureau will be able to secure maximum benefits to the natives. As long as the bureau's work is confined to numerous small villages, only minimum results can be expected at

a heavy cost per capita. At the present time the small schools do not justify grammar grades, and it has been customary for advanced native children to enter the Indian schools of the States. This usually results in physical breakdowns due to the change of climate, environment, and absence from home. It should be possible for native children to advance as far along educational lines as they desire without the necessity of leaving home. This can come only when the natives are persuaded to live in larger communities which will justify the establishment of larger and more complete schools. The concentration of the bureau's work on large villages, made possible through the favorable conditions of the reserves, will hasten the arrival of the day when the native of Alaska will take his place along with his white brother in the affairs of the Territory.

That the natives are loyal to the United States has been especially proved the past year through the work which the natives have contributed for the Red Cross and the purchases they have made of Liberty bonds and War Savings Stamps. Through the agency of the teachers, Red Cross auxiliaries have been established in many native villages, and the zealous and untiring work of these native organizations is a great credit to them. The work done in knitting, sewing, etc., for the Red Cross is equal to the best work done by white organizations. The purchase of bonds and stamps has not lagged behind the Red Cross work.

2. PUBLIC EDUCATION OF WHITE CHILDREN IN ALASKA.¹

A. INTRODUCTION.

Until very recently the public education of the white children of Alaska has received comparatively little attention. Before 1906, when the Territory was first allowed to send a Representative to Congress, education in Alaska centered upon the native population—Indians and Eskimos. Much has been written about the education of Indians in Alaska, but there has been little demand for an authentic account of them. The year 1917, however, saw so great an advance in the education of Alaska's white children that the demand for an accurate history of their education now warrants the compiling of all available definite information upon the subject.

Since the occupation of the Territory by white people, the native population has been practically stationary. The natives far outnumbered the white people until the Klondike gold rush in 1897 and 1898, and even now the latter compose only about 40 per cent of the total population, the number of white people at the present time being about 30,000.² Until 20 years ago the number of white

¹ Prepared by Floy Tracy, superintendent of public schools, Douglas, Alaska.

² Report of Gov. Riggs, 1918, p. 10.

children in Alaska was so small in comparison with the number of native children that for the most part their education was identical with that of the native children. Even to this day, in the 85 native schools of Alaska, there are 390 children of mixed blood and 12 white children. This study therefore will of necessity treat of the education of the native children of Alaska in so far as the education of both native and white children was and is identical, although its main purpose will be to set forth the facts in the development of the public education of Alaska's white children.

B. RUSSIAN SCHOOLS.

The immigration of white settlers into Alaska began soon after the discovery and exploration of the country, in 1741, by the Russian adventurer, Behring. From that time until 1867, when Alaska was officially transferred from Russia to the United States, the white population was made up principally of Russian traders and their families and Russian priests of the Greek Catholic Church and their families. These Russian priests had, and still have, a very important part in the education of the Territory. At the time of the transfer, they were maintaining several school in Alaska, five of these—two lower, two higher, and one theological school—being located at Sitka, at that time the capital of Alaska.

These schools were supported by the Russian Government. Indeed, until 20 years after the transfer, the Russian Government expended more money annually for the schools of Alaska than America itself. In that year, 1887, Gov. A. P. Swineford, in his report to the President of the United States, alleged that the 17 Russian schools were receiving from the Russian Government \$20,000, whereas the 15 United States schools were receiving from the Government at Washington, D. C., only \$15,000.

The principal Russian schools at that time were situated at Sitka (57 pupils), at Kodiak (22 pupils), at Kenai (15 pupils), at Nushegak (8 pupils), at St. Michaels (7 pupils), at Unalaska (59 pupils), at Unga (30 pupils), and at Belkovsky (25 pupils).

In 1894, the number of Russian schools had been reduced to 6, and in 1896, according to Gov. Sheakley's report, there were 8 such schools. Three or four of these Russian parochial schools are still existing in Alaska. These schools ministered principally to the Indians of their respective communities, but they were also of great benefit to the Russian white children of the Territory. After the transfer these schools taught English as well as Russian, the teachers often speaking very pure English. One of the most noted of these Russian families of priests was the Kashevaroff family, consisting of

five priests, two of whom are now conducting Greek churches at Kodiak and Juneau, respectively.

C. FIRST SCHOOLS FOR AMERICAN WHITE CHILDREN.

When Alaska became a possession of the United States, in 1867, it was first placed under military rule. It was then too remote from the Government at Washington to receive much attention of any kind, especially with respect to schools. The white settlers were but a handful, and the natives were considered "too unsavory to be touched." Accordingly, the white people at the capital, Sitka, which had in 1867 a total population of 5,000, took matters into their own hands, organized a city government, elected two school trustees, and made the mayor *ex officio* chairman of the school board. This school board immediately bought a building for \$300 and established a school. The school and town passed through a rather precarious 10 years, but both finally died in 1877.

This school for white children is the first of which we have any definite record, although two others are known to have existed at the same time on two of the Pribilof Islands, St. Paul Island and St. George Island, respectively, under the jurisdiction of the Alaska Commercial Co.

D. PRESBYTERIAN MISSION SCHOOLS.

In 1878, the board of home missions of the Presbyterian Church sent a missionary to Sitka. He at once established a school for Indian children, and through his influence, Miss Pauline Cohen, an American girl living at Sitka, was prevailed upon to conduct a school for white children, her salary being raised by subscription. For one year all the white children of school age at Sitka attended Miss Cohen's school, even those of the Greek Church, who were permitted, however, to receive religious instruction from the priest one hour a day. In 1879, Mr. A. E. Austin, of New York, took charge of this school, and in the next year his younger daughter helped him.

The Presbyterian board of home missions soon extended its work among the Indians by establishing four day schools and two industrial schools, one of the latter at Sitka and the other at Wrangell. The authorities at Washington, D. C., then recognized the worth of these schools by granting them Government aid. The Sitka Industrial School, which finally absorbed the Wrangell school, is still pursuing its eminently useful work at an annual cost of \$35,000 to the Presbyterian Church, the United States Government having dropped its support in 1894. The school now has 150 pupils and 10 teachers.

MISSION SCHOOLS OF OTHER DENOMINATIONS.

Other denominations have at different times conducted schools in Alaska. Gov. A. P. Swineford in 1888 reported the number of these schools, excluding the 17 Russian schools, as follows:

1 Presbyterian Training School at Sitka.¹

1 Friends' school at Douglas.¹

3 Catholic schools.

2 Episcopalian schools.²

3 Moravian schools.

2 Swedish Lutheran schools.

Total number, 12.

In 1892 Gov. Knapp recognized the great work of these missionaries when he recommended to the President that these schools receive aid from the United States Government, stating:

Shall a little sentiment, or a pet theory not applicable here, prevent our encouraging these noble agencies for the accomplishment of the very work we, as a Nation, desire to accomplish, and which there is no hope of our doing ourselves? I do not hesitate to assert that the best educational work which has yet been done in Alaska has been done through these mission agencies.

This recommendation evidently found favor with the Government, for Gov. Sheakley in 1894 reported that the Government had that year given aid to 15 mission schools. However, this practice was unfortunately discontinued soon afterwards.

At the present time the Roman Catholic parochial schools are the principal remaining mission schools in Alaska. St. Ann's parochial schools at Juneau and Douglas are the largest of these, that in Juneau having an attendance in 1917 of about 60, while that in Douglas had an attendance in 1917 of about 45 pupils.

B. SCHOOLS MAINTAINED BY THE UNITED STATES GOVERNMENT.

In 1884, on May 17, Congress passed the first law with reference to education in Alaska. Section 13 of this "Organic Act," as it was called, provides:

That the Secretary of the Interior shall make needful and proper provision for the education of children of school age in the Territory of Alaska without reference to race until such time as permanent provision shall be made for the same, and the sum of \$25,000, or so much thereof as may be necessary, is hereby appropriated for this purpose.

A year later (Mar. 3, 1885) the execution of this act was committed to the Bureau of Education at Washington. The Secretary of the Interior, Hon. L. Q. C. Lamar, appointed Rev. Sheldon Jack-

¹ Partly supported by the Government.

² In 1896 four Episcopalian schools in Alaska were placed in charge of Dr. Peter Trimble Rowe, who is now bishop of the Episcopal Church in Alaska.

son, of the Presbyterian board of home missions, the general agent of education for the Territory, a position which Rev. Mr. Jackson held until 1907. Mr. Jackson, during the summers, also established much-needed schools at Juneau, Sitka, Wrangell, Killisnoo, Hoonah, Haines, and Unalaska. He also sent teachers to several more remote places, even to an Eskimo village on the Kuskokwim River, 150 miles above its mouth at Bering Sea. As yet the white population numbered but 1,900 in all, and lived principally in southeastern Alaska. White children at this time attended the Government schools at Sitka, Juneau, Wrangell, and Killisnoo, but the majority of the children taught were Indians.

In 1886, Gov. Swineford lamented the fact that, although there were now 2,000 children of civilized parentage in Alaska, the appropriation by Congress of \$25,000 for their education had been reduced to \$15,000. The Indians, he complained, were, on the contrary, receiving not only the major part of this \$15,000, but \$20,000 besides for their industrial schools at Sitka and Wrangell. Up to this time Congress had appropriated \$75,000 for these two industrial schools, and but \$65,000 for schools without reference to race.

There was at this time no legislative assembly in the Territory, and the people of Alaska did not even have a representative in Congress, so that the written report of the governor was practically the only medium through which the needs of the Territory could be presented to the National Government. It is not to be wondered at, then, that the national legislators, none of whom had ever visited Alaska or had any means of studying authentic descriptions of it, for there were none, should have taken so little interest in the few hundred white children of the northland who were growing up in ignorance.

However, in 1887, through the influence of Gov. Swineford, a Territorial board of education was appointed by the Secretary of the Interior, consisting of the governor, the judge of the United States District Court, and the general agent. This board was to carry out the orders of the Commissioner of Education.

In 1891, however, the management was again changed to Washington, D. C. After that, the general agent made one trip a year to Alaska, usually visiting the most conveniently located schools only, for there was not money enough to provide for the more difficult traveling.

In 1889 there were two schools exclusively for white children in Alaska, one at Juneau and one at Sitka. Two years later another was established at Douglas. That year Gov. Knapp complained that, although Alaska had a school population of 10,000, schools were provided for but 500.

F. SCHOOLS MAINTAINED BY INCORPORATED TOWNS.

As the white population steadily grew, one or two new schools were established each year. That the number of schools was never adequate, however, is evidenced by the fact that each governor kept pleading with Congress every year for larger appropriations.

In 1898, for instance, the second year of "movement and stir and push," following the discovery of gold at the Klondike, there were 9,000 more white people in the district than the year before, and the school appropriation was still only \$30,000. Skagway, a city at the entrance to the White Pass, the most popular route to the Yukon River, had 116 school children and no school. Dyea, another mushroom town, was without a school. Juneau, Douglas, and Wrangell were demanding extra teachers, but there was no money.

Finally, in 1899, Gov. Erady suggested a remedy. He urged Congress to grant to communities the power of incorporating town governments which could levy taxes and support their own schools. He also advocated that each incorporated town be allowed a certain amount of the license money from the sale of intoxicating liquors to spend upon its schools.

The next year Gov. Brady's suggestion was followed out. Section 28 of Document 137 of the second session of the Fifty-fifth Congress reads:

The Secretary of the Interior shall make needful and proper provisions and regulations for the education of the children of school age in the District of Alaska, without reference to race, and their compulsory attendance at school until such time as permanent provision shall be made for the same.

This law allowed communities to incorporate as towns and to use one-half of their liquor-license money for school purposes under the direction of a school board of three members.

Thus was instituted in Alaska the dependence of her schools upon the liquor business. It was, for the time being, at least, a remedy for the school situation in the crowded communities, since Juneau, for example, could in this way obtain \$15,000 for her schools.

Not long afterwards the incorporated towns were empowered to use all their liquor-license money for schools and to levy a school tax on property as high as 2 per cent. In 1901, under the incorporated-town law, Juneau, Skagway, Ketchikan, and Treadwell took charge of their own schools.

The schools for Indians within the limits of incorporated towns, as well as those outside these limits, remain to this day under the jurisdiction of the Commissioner of Education at Washington, who has appointed one superintendent and five district superintendents to take charge of them. Mr. W. T. Lopp, with headquarters at Seattle,

Wash., has been superintendent of these United States Government schools since 1910. (See Bureau of Education Bulletin, 1916, No. 47.)

The progress of the incorporated town schools for white children has been remarkable. In 1903, three years after the passage of the law, 9 such schools had been established. In 1904 the act providing for incorporated towns was amended to include among the communities which might incorporate those having a population of 200 or more. In 1908 there were 11 incorporated town schools, 13 in 1910, 14 in 1916, with 3 in incorporated school districts.

The status of these schools and of other educational activities is shown by the following quotations from the report of Gov. Riggs, 1918, pp. 75-79:

There are 15 schools in incorporated towns and 3 in incorporated school districts, supported in part by territorial appropriation. The averages for the 18 schools, as shown by the table of statistics, is as follows: Average number of teachers, 4.8, with average yearly salary of \$1,205.26 per teacher; average enrollment, 120; average daily attendance, 94.2; average cost of maintenance, exclusive of teachers' salaries, \$3,777.82. The average cost per pupil was \$80.14, as compared with \$76.84 for the previous year.

Statistics of white schools for the school year 1917-18.

Location.	Number of teachers.	Total enrollment.	Average daily attendance.	Term (mos.).	Grade school graduates.	High school graduates.	Expenditures.		
							Salaries of teachers.	All other.	Total.
<i>In incorporated towns.</i>									
Cordova.....	4	106	71.70	9	4	.....	\$5,220.00	\$7,669.59	\$12,889.59
Douglas.....	9	206	171.40	9	12	4	9,005.04	4,172.65	13,177.69
Eagle.....	1	11	8.81	7	1	.....	840.00	408.75	1,248.75
Fairbanks.....	8	206	181.60	9	19	7	15,189.75	5,640.10	20,829.85
Haines.....	2	46	31.00	9	2	.....	1,800.00	518.28	2,318.28
Iditarod.....	1	8	8.00	9	.....	.....	1,350.00	380.78	1,730.78
Juneau.....	14	348	271.28	9	21	13	16,490.00	7,744.24	24,234.24
Ketchikan.....	9	264	194.70	9	13	2	10,665.00	4,063.47	15,368.47
Nome.....	6	127	92.90	9	5	1	8,775.00	4,429.97	13,204.97
Petersburg.....	4	91	71.92	9	4	.....	3,915.00	2,922.75	6,837.75
Seward.....	4	103	84.00	9	5	.....	4,725.00	2,416.45	7,141.45
Skagway.....	5	122	96.30	10	.....	.....	4,005.00	4,264.00	8,269.00
Tanana.....	1	17	14.00	9	.....	.....	1,800.00	564.22	2,364.22
Valdez.....	5	101	64.00	10	3	2	4,950.00	4,273.35	9,223.35
Wrangell.....	4	102	79.20	9	4	.....	3,780.00	1,605.85	5,385.85
Total.....	77	1,847	1,440.81	.....	93	29	92,509.79	51,704.45	144,214.22
<i>In incorporated school districts.</i>									
Anchorage.....	8	274	219.6	9	14	.....	10,332.50	12,054.82	22,387.32
Nenana.....	1	28	27.1	8	3	.....	1,415.00	3,994.09	5,409.09
Talkeetna.....	1	8	8.0	6	2	.....	600.00	247.43	847.43
Total.....	10	310	254.7	.....	19	.....	12,347.50	16,296.34	28,643.84
Grand total.....	87	2,157	1,695.51	.....	112	29	104,857.49	68,000.79	172,858.08

CITIZENSHIP NIGHT SCHOOLS.

Night schools had been organized in two of the cities of Alaska prior to the 1917-18 school year. The passage of the citizenship night-school law as contained in chapter 33, 1917 session laws, and the appropriation of \$5,000 for

carrying out its provisions during the period ending March 31, 1919, however, gave a new impetus to this branch of educational activity. Six communities organized under its provisions and received Territorial appropriations amounting in all to \$2,918.81. In addition to undertaking work of the scope permitted under the law referred to, several communities conducted night schools, which offered a greater variety of subjects and which attracted a larger enrollment than would have been possible with the limited amount of money available from the Territory. In all, seven schools were organized. No reports are available from one, so that general statistics appearing below cover but five citizenship night schools and six general night schools.

Citizenship night schools.

School.	Enrollment.		Average attendance.		Sessions weekly.	Number weeks.	Expenditures.
	Men.	Women.	Men.	Women.			
Anchorage.....	100	50	50	25	5	24	\$1,248.90
Douglas.....	6	19	5	11	2	24	375.00
Juneau.....	20	11	8	5	2	20	378.00
Ketchikan.....	27	17	11	10	2	15	397.00
Nanana.....	46	3	39	3	5	16	480.00
None (no report).....							400.00
Total.....	199	100	113	54			3,277.56

The difference between the total expenditure, \$3,277.56, and the amount received from the Territory, \$2,918.31, represents money collected from tuition fees, etc., for the support of these schools.

Different subjects offered: Reading, writing, spelling, arithmetic, English, United States history, United States civics, public speaking.

Different nationalities (24) represented: American, Alaska native, Austrian, Bohemian, Bulgarian, Canadian, Danish, Dutch, Finnish, French, German, Greek, Irish, Italian, Japanese, Mexican, Montenegrin, Negro, Norwegian, Russian, Scotch, Serbian, Swedish, Swiss.

General night schools, including citizenship night schools.

School.	Enrollment.		Average attendance.		Sessions weekly.	Number weeks.	Expenditures.
	Men.	Women.	Men.	Women.			
Anchorage.....	160	83	100	50	5	25	\$1,741.90
Cordova.....		20		19	5	19	350.00
Douglas.....	10	58	8	50	2	24	577.75
Juneau.....	24	33	11	23	2	20	787.41
Ketchikan.....	22	17	11	10	2	15	367.00
Nanana.....	46	3	39	3	5	16	480.00
None (no report).....							400.00
Total.....	252	214	169	155			4,734.06

Nationalities represented, the same as above.

Subjects the same as above with the addition of French, Spanish, shorthand, typewriting, business English, and mineralogy.

G. THE NELSON SCHOOLS.

Until 1905 the children of white or mixed blood outside of incorporated towns were compelled to attend the United States schools,

without reference to race, which had been provided for 20 years before, and which were attended chiefly by Indians. But on January 27, 1905, Congress passed what is known as the Nelson bill, providing for the establishment of a school exclusively for children of white or mixed blood in any community applying for it which had at least 20 such children of school age. The governor was made *ex officio* superintendent of these so-called Nelson schools, and they were to be supported by 25 per cent of the tax money collected outside of incorporated towns by the United States Government.

This law has proved a boon to many communities in Alaska, although each year until 1917 the governor has without avail sought to have the minimum number of children required for the establishment of a Nelson school reduced from 20 to 15.

Following is a table giving all the available statistics regarding the progress of these Nelson schools:

Statistics of the Nelson schools.

Date.	Number of Nelson schools.	Number of teachers.	Number of pupils.	Total cost of maintenance.
1907.....	10	.....	438	\$19,980.00
1908.....	17	.....	672	38,116.00
1909.....	21	.....	684	40,782.00
1910.....	21	.....	691	36,486.00
1911.....	22	.....	.....	.....
1912.....	.....	.....	.....	50,008.00
1913.....	26	37	943	.....
1914.....	27	38	941	.....
1915.....	31	41	961	66,562.53
1916.....	37	50	1,470	78,241.49
1918.....	46	58	1,180	100,046.84

ALASKA AGRICULTURAL COLLEGE AND SCHOOL OF MINES.¹

Chapter 34 of the session laws of 1917 provides for the acceptance of grants of land and money for the Alaska Agricultural College and School of Mines in accordance with the provision of the acts of Congress approved August 30, 1890, and March 4, 1915. Under chapter 62 of the session laws of 1917, providing for the establishment of such college, the sum of \$60,000 is appropriated for construction of buildings and the purchase of equipment. The building, on a site near Fairbanks, set aside for the purpose by Congress, is well under way.

H. NATIONAL LEGISLATION IN 1917 REGARDING THE WHITE SCHOOLS.

Alaska was without a representative in Congress until 1906, when her first Delegate was elected. From that time on, the needs of Alaska have been set forth before the National Government more forcefully than ever before. Although the Delegate has no vote, he has a right to speak in the House of Representatives, is a member of various committees, and can bring the affairs of Alaska to the attention of the various officials at the capital in person.

¹ From the report of Gov. Riggs, 1918.

It was not until Congress authorized the building of a Government-owned railroad in Alaska from Anchorage to Fairbanks in March, 1917, that the people of Washington could be made to take much interest in Alaskan affairs. The beginning of the European war in the same year, too, and the opening of the Panama Exposition at San Francisco in 1915, caused thousands of American tourists to visit Alaska, and thus made reference to Alaska on the floor of Congress more frequent and intelligible.

The first national legislation directly influencing Alaskan schools for white children was passed in 1917. The reader will recall that the schools of Alaska, and especially those of incorporated towns depended for their support largely upon the liquor traffic license money. In November, 1916, the people of Alaska by referendum voted in favor of Territorial prohibition. It had been the intention of the members of the second session of the Territorial legislature who provided for this referendum vote that, in the event of a victory for prohibition, a law restricting the sale of intoxicating liquor should be framed by the next legislature to go into effect on January 1, 1918. Social workers of various organizations, however, realized how precarious the passage of such a bill would be so long as the legislature had as little power for making up the deficit in school money as it then had. Accordingly, largely through their efforts a "bone-dry" law was passed by Congress on the last day of its sixty-fourth session, March 3, 1917. The news of the passage of this bill was at first received with indifference even by the prohibitionists of Alaska, and with disgust by the people of incorporated towns, the newspapers of which attacked its advocates very bitterly. But these feelings were soon changed to patriotic rejoicing when it was learned that Congress had also granted to the Territory the right to control her own schools for white and native children, and to use Territorial funds for their support. This latter provision at once gave to Alaska about \$300,000 to spend upon her schools.

I. TERRITORIAL LEGISLATION REGARDING SCHOOLS FOR WHITE CHILDREN.

On March 4, 1913, the first Territorial legislature convened in Juneau, the capital. This body was composed of two houses, the house of representatives with four members from each of the four judicial divisions of Alaska, and the senate with two members from each of these judicial divisions. Its powers were very limited, but it passed many necessary and progressive laws, 84 in all, the most notable of which was the granting of the suffrage to women.

This legislature did two noteworthy things for education. One was to pass a law compelling children between the ages of 8 and 16, living outside of incorporated towns, and within 2 miles of a school,

to attend that school. Although this law was not enforced, because there was no appropriation made by Congress for truant officers, it at least established a good precedent for future legislation. The other noteworthy act was to memorialize Congress for a board of education, a board of examiners, and two school superintendents for the white schools of the Territory.

That same year Gov. J. F. A. Strong recommended an appropriation by Congress for the working out of a uniform school system, with uniform textbooks and a uniform course of study. This recommendation Gov. Strong repeated each year until 1917.

At the second session of the Alaska Legislature a bill for a uniform school system was actually framed and passed. This bill made provision for an appointive school board of three members, namely, the governor (*ex officio* president and superintendent of public instruction), the Territorial treasurer, and the assistant superintendent of public instruction, who was to be at first appointed by the governor, but later elected every four years. The assistant superintendent, who was to have charge of instituting and administering a uniform school system, was to be a citizen of the United States, a graduate of a State normal school, a graduate of a standard college or university, and a teacher of at least five years' experience. He was to receive a salary of \$3,000 annually and a maximum of \$2,000 for traveling expenses.

The legislature of 1915 passed one other important school law. This was a bill making it possible for Nelson schools to be established in communities having but 10 children of school age instead of 20, as required in the original Nelson bill of 1905.

Both these bills, however, when transmitted to Congress, were accounted to be out of the scope of power granted to the legislature in 1912 (Public Act 334) and were therefore void and of no effect.

The third session of the legislature in 1917 was held immediately after the passing by Congress of the "bone-dry law" for Alaska and of the law granting the Territory both money and power for school legislation. It was therefore with great interest that the people awaited its acts relating to schools. Nor were they disappointed in their expectations. The senate and the house of representatives, as soon as their organization had been accomplished, appointed a joint committee on education consisting of five representatives and two senators. It was unanimously agreed that a uniform school bill must be passed and that some provision must be made for replacing in incorporated towns the school revenue to be lost through prohibition.

There were many other important school questions to be settled. The Nelson school bill must be changed in effect so that communities having fewer than 20 school children might establish schools. This question was decided by House bill No. 84. This bill reads:

The clerk of the district court shall have the power, and it shall be his duty, in the division to which he is appointed and in which he resides, upon petition as hereinafter specified, to establish by order in writing a school district at any camp, village, or settlement outside of the limits of any incorporated town, but such school district shall not embrace more than 40 square miles of territory, nor contain less than 10 resident white children between the ages of 6 and 20 years.

And further that—

The qualified voters of said school district shall choose by a plurality vote a school board of three members who shall have the power to build or rent the necessary schoolhouse or schoolrooms, to equip the same with the necessary furniture and fixtures, to provide fuel and light, to hire and employ teachers, and in general to do and perform everything that may be necessary for the maintenance of the public school. The members of said board shall hold office for the term of one year and until their successors are elected and qualified. An annual election shall be held each year, after the first election, for the election of members of said board.

The bill also provides more money for school buildings than the original Nelson bill. Quoting from Gov. Strong's report of 1916, the inadequacy of this former fund is clearly set forth:

As a matter of fact, while the teachers employed are without doubt far superior to the school teachers of 25 or 50 years ago, the schoolhouses and grounds are no better, and in some cases not so good as those found a half century ago in many of the States of the Union. The cost of construction and equipment of schoolhouses in rural communities is limited to \$1,000, a sum so manifestly inadequate that comment would seem to be superfluous. The demand for funds to maintain the schools already established has so increased that the strictest economy must be practiced in order to maintain schools in all of the organized districts. Therefore, the school buildings are inferior and lack almost every modern appliance and comfort, except desks and seats. The school grounds are for the most part unsightly and repelling instead of being inviting and attractive, although as a rule the teachers do the best with the limited means at their command to make their surroundings as pleasant as possible.

This condition is met by the following provision in House bill No. 84:

The governor shall assign and set apart to each school district established and organized under the provisions of this section a sum not less than \$800 nor more than \$1,800, in proportion to the number of pupils in the district, for the construction and equipment of a schoolhouse, which sum shall be paid by the Secretary of the Treasury to the treasurer of the school district, upon the order and voucher of the governor, out of that portion of said Alaska fund set apart for the establishment and maintenance of public schools.

A second important school bill was House bill No. 35, framed and introduced by the joint committee on education. This bill was framed especially to meet the peculiar situation in Anchorage. Anchorage is a new town which has grown up since the choice of that point on Cook Inlet in 1915 as the terminal from which to begin work on the Government railroad opening up the Matanuska coal

fields. This town, the site of which is owned by the Government, is under the administration of the Alaska Engineering Commission. The commission has constructed an ideal municipality with graded streets, sidewalks, telephone lines, water service, Federal jail, and post office. A school for whites, under the Nelson system, has been built there, seating 150 pupils and having in 1916 four teachers. But the town is steadily growing, and the school needs are much larger than the Nelson school system can fulfill. Since the town by its nature can not be incorporated, it was incumbent upon the legislature of 1917 to devise some means of establishing a better school at Anchorage. House bill No. 35 therefore makes provision—

That any town, village, or settlement in the Territory of Alaska outside of the limits of any incorporated town, having a population of 100 or more and 80 children between the ages of 6 and 20 years, may incorporate as a school district in the manner hereinafter provided, but such school district shall not embrace more than 40 square miles of territory.

That each school district organized under the provisions of this chapter shall have a board of directors of five members to be elected as hereinafter provided, who shall have the exclusive management and control of all school matters in the school district subject to such general laws governing the grading and superintendency of schools as may be now or hereafter enacted by the Territorial legislature.

That said boards of directors shall have the power to levy and collect taxes upon all real and personal property within the limits of their respective districts not exempt therefrom by existing law, not to exceed 1 per cent of the assessed value of such property in any one year and all moneys collected by such taxation shall be expended in payment of the cost of levying and collecting such taxes, in payment of the cost of conducting school elections, and for the construction and maintenance of schools only.

Section 13 of the act also states that "an emergency is hereby declared to exist, and this act shall be in effect from and after its passage and approval."

But the educational bill in which the people of the Territory felt most interest was that intended to furnish a substitute to the schools of incorporated towns for the revenue previously derived from saloon licenses. Two such bills were introduced in the house of representatives, and the other the "75 per cent" bill. The first of these, the so-called "fifty-fifty" bill, proposed to give to incorporated towns one-half of the money needed to meet their expense budget for the ensuing year. The other, the "75 per cent" bill, proposed to grant to incorporated towns three-fourths of the money needed to maintain their schools during the preceding year. Both bills included a clause making \$15,000 the maximum amount to be granted to any one school. After many weeks of debate and intense activity on the part of champions and opponents alike, near the close of the session the "fifty-fifty" bill, now changed to a sixty-forty compromise bill, was passed. The senate then amended it to grant

to incorporated towns not 60 per cent but 75 per cent of their school maintenance funds. The house concurred in this amendment and the bill was signed by the governor, causing, of course, great rejoicing in all incorporated towns.

The Territorial money available for the maintenance of these schools and the Nelson schools for the next fiscal year will be as follows:

Twenty-five per cent of the Alaska fund, which comprises "all moneys derived by the Federal Government from business and trade licenses outside of incorporated towns and which are passed to the credit of the Treasurer of the United States." This money was appropriated by Congress in 1913 for the maintenance of white schools outside of incorporated towns, and in 1916 amounted approximately to \$82,500.

Twenty-five per cent of the Territory's 25 per cent of receipts from the National Forests in Alaska, in accordance with act of Congress, June 30, 1906, amended March 4, 1907, and May 23, 1908, respectively, which appropriates this money for the benefit of public schools and public roads. For the year ending December 31, 1916, this fund amounted to \$21,851.75.

About \$240,000 was derived from the Territorial Revenue Act passed by the Alaska Legislature, 1915, which imposes a graduated schedule of taxation upon fisheries and upon cold-storage fish plants.

Last of all was passed the educational bill, constituting the uniform school law, of which the Territory had most need in order to reach the standard set by other progressive States and countries. This law has produced a marked change in the status of the white schools of Alaska.

Before this time the governor of Alaska was the ex officio superintendent of public instruction, but because of his manifold duties, he had far too little time to devote to the schools. Under Gov. Strong excellent results were obtained in the compiling of statistics of white schools and in the spreading of information and creation of public opinion which brought about the progressive legislation of 1917. Gov. Strong instituted the issuing of two-year certificates to teach in Alaska to all teachers actively engaged in teaching in the Territory, upon presentation of such certificates, diplomas, or other credentials as would properly qualify them for such a permit.

Until 1917, however, "there was no supervision of schools and there were no courses of study in the rural schools with any degree of uniformity. Lacking systematic inspection, there was no cooperation among the schools." There were no teachers' organizations, and the only school publications were High School Annuals published by such schools as Juneau and Douglas. The courses of study were not standardized, and they, as well as the textbooks, were

changed with the advent of every new teacher, who chose both course of study and text books from those he or she was most familiar with, usually those of Washington, Oregon, or California. Offsetting these disadvantages, however, is the fact that—

The vast majority of the teachers in Alaska have two qualifications which make for successful school work in this country where direct supervision of schools is necessarily limited—these are professional training and experience. Two-thirds of the teachers of Alaska are normal school or college graduates; 88 per cent of the high-school teachers are college graduates who have in addition had advance study. The average teaching experience of Alaska teachers is seven and one-half years, exclusive of the school year for which the report is made.

Commendable work has therefore been accomplished even under trying circumstances. This is true of incorporated towns especially. The following quotation from Gov. Strong's report of 1916 well summarizes the progress made:

The graded schools maintained in incorporated communities are doing good work under efficient superintendents, and with excellent courses of study. Graduates of some of the high schools of Alaska are matriculated at the University of Washington, located at Seattle, without examination, and each year there is a substantial enrollment of students from Alaska. Graded schools are maintained in 14 incorporated towns of the Territory, and in 9 of these towns high schools are established.

In April, 1916, the high schools of Douglas and Juneau were accredited by the University of Washington after an inspection tour by Dr. F. W. Meisnest, of the university, who pronounced them on a par with the accredited high schools of corresponding size in the State of Washington. In these incorporated town schools, many of the most progressive theories of education have been worked out to successful conclusions. For instance, in Douglas, during the year 1916-17, the following projects have been successfully carried on:

The Six and Six Plan, whereby a junior high school consisting of the seventh and eighth grades has been established, making the break between grade and high school at the end of the sixth year, and giving these pupils the advantage of the departmental plan.

Manual training and domestic science in high school.

A school library conducted by high-school pupil librarians.

A high-school annual paper, with 75 pages of reading matter and 15 photographs.

A high-school dramatic club which produced the first pageant in Alaska, and earned for the school last year about \$350.

A high-school orchestra.

Interscholastic debating.

High-school athletics, with several interclass and interschool athletic teams.

The application of Thompson's minimum essential tests.

Music, drawing, physical culture, manual arts, and gardening throughout the grades.

Medical and dental inspection.

A parent-teacher association of over 100 members, which purchased a \$200 victrola, a set of dishes, and Indian clubs and dumb bells for the school.

It is evident, however, that the schools of the incorporated towns as well as those of the Nelson system suffered from lack of cooperation and systematization. As remedying these grave defects the importance of the uniform school act of 1917, described above, can not be overestimated. As finally adopted, this act provided for a Territorial board of education to consist of four elected members, namely, one senator from each judicial division, and the governor, who should be ex officio president of the board. The first board, however, was elected by the legislature from the members of the senate then in session, and the school board which is now in office and will be until the next session in 1919 is composed of the following members:

Gov. Thomas Riggs, jr., ex officio president.

Hon. O. P. Hubbard, of Valdez, president of senate, 1915.

Hon. James Robert Heckman, of Ketchikan.

Hon. O. P. Gaustad, of Fairbanks.

Hon. F. A. T. Aldrich, of Nome.

The act further provides for the appointment by the school board of a Territorial commissioner of education, at a salary of not more than \$3,600 per annum, who shall have an office in Juneau with an allowance of not more than \$2,000 per annum for clerical help and office expenses. He is to be chosen upon merit, and the only limitation put upon his qualifications is that he shall be a citizen of the United States. A maximum sum is appropriated for his traveling expenses also, and three months' leave of absence from the Territory is granted him each year for the purpose of study and attendance upon educational conventions. The commissioner's duties as set forth in the act include: The supervision of all matters pertaining to the public schools of the Territory of Alaska, to include all schools both within and without incorporated towns; the obtaining of annual reports from the president, superintendent, or principal of all public educational institutions and private schools; the keeping in his office of records, books, and papers pertaining to the educational interests of the Territory; the preparing of a minimum course of study and a uniform textbook system for the public schools of the Territory; the publishing and distributing to school boards of the Territory bulletins or pamphlets relating to educational work; the prescribing of rules and regulations for the government of the public schools, including rules of attendance, punctuality, truancy, etc.; the examining of schools throughout the Territory, and accrediting of those reaching a certain standard; and the examining of and granting of certificates to applicants desiring to teach in Alaska.

Immediately after the close of the session of the legislature, on May 4, 1917, the Territorial school board met, organized, and considered applications for the position of Territorial commissioner of education. Mr. L. D. Henderson, then superintendent of schools at Juneau, was chosen to be the first Territorial commissioner. He has already established an office in Juneau, and has begun the arduous task of standardizing the white schools of Alaska.

CONCLUSION.

It will be seen that the public schools for the white children of Alaska had to pass through three distinct phases: First, they had to be separated from the influence of religious denominations, in 1894. Secondly, they had to be distinguished from schools for Indian children in 1900 and in 1905. Lastly, they had to be brought out of the jurisdiction of a remote and apathetic National Congress into the control of the people of Alaska themselves. Now that this last step has been attained, it is hoped that the white schools of Alaska rank among the most progressive schools in the world.



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REVIEW OF
EDUCATIONAL LEGISLATION
1917 *and* 1918

By

WILLIAM R. HOOD
DIVISION OF SCHOOL ADMINISTRATION
BUREAU OF EDUCATION

[Advance sheets from the Biennial Survey of Education
in the United States, 1916-1918]



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REVIEW OF EDUCATIONAL LEGISLATION, 1917 AND 1918.

By WILLIAM R. HOOD.

Division of School Administration, Bureau of Education.

CONTENTS.—The Federal Government and education: Vocational education; Education for the disabled soldier; Mobilizing educational institutions; Training soldiers in the common-school branches; Schools on Government industrial reservations; Naval education; Enlarged activities of the Department of Labor; Other agencies; Expansion of the Bureau of Education; Council of National Defense—State legislation: General State administration; County administration and supervision; The school district; Consolidation; Public-school support; Improvement of the teaching personnel; Certification of teachers; The school term; Compulsory school attendance; Health and sanitation; High schools; Special classes for atypical children; Civic and patriotic instruction; Elimination of illiteracy and the Americanization of aliens; Community organization in schoolhouses; Textbooks; Libraries; Higher education.

Within the two years comprehended in this review the Congress of the United States has been in almost continuous session, and all the States, except Alabama, have held meetings of their legislative bodies. Six States—Georgia, Massachusetts, New Jersey, New York, Rhode Island, and South Carolina—hold annual meetings of their legislatures, and these, of course, had legislative sessions both in 1917 and in 1918. Within this period, special sessions were held in some States. Alabama is not included in this review for the reason that its legislature meets quadrennially and will not meet again until early in 1919.

The legislation of any year, particularly an odd-numbered year when 42 or 43 legislatures are in session, is invariably made up in large measure with enactments relating to education, and this is none the less true of the two years here considered. Distinctly new educational movements, however, have not been especially conspicuous in laws enacted. Progress in school legislation has partaken rather of the nature of improving older laws and moving along lines already well defined. A few elements have operated in legislatures with the probable effect of distracting attention from educational matters. The European war has been among these elements. The war and its concomitants have been uppermost in the minds of the people and in consequence have not gone without effect on State legislation. But it can hardly be said that this effect has been essentially hurtful.

On the contrary, as will appear later in this chapter, some very wholesome educational measures have received impetus from the war spirit.

THE FEDERAL GOVERNMENT AND EDUCATION.

The Government is more concerned with education than most people suppose. Of the 10 executive departments at Washington, at least 8 include bureaus or other agencies which touch education vitally at some point. Among the more noteworthy of these are the Bureau of Education and the Office of Indian Affairs of the Department of the Interior, the Public Health Service of the Department of the Treasury, the States Relations Service of the Department of Agriculture, the Children's Bureau, and the Bureau of Naturalization of the Department of Labor, and the great training branches of the War and Navy Departments. In addition to these, the Library of Congress, the Smithsonian Institution, the Council of National Defense, the Committee on Public Information, and some other agencies serve an educational purpose not only through their broader information-giving activities, but through school channels as well. The work of all of these agencies challenges our attention afresh, now that the Government is extending its educational activities along other lines.

VOCATIONAL EDUCATION.

Prior to 1917 the Government had adopted and pursued several well-defined policies with regard to education. These are seen in the consistent granting, upon the admission of each State, of lands from the public domain for the endowment of the common schools; the provision of school facilities for dependant peoples such as Indians; the encouragement of higher agricultural and technical education by the enactment of the first Morrill Act of 1862 and supplementary acts; and the maintenance of extension work, particularly in agriculture, as provided in the "Smith-Lever Act" of May 8, 1914. In 1917 another and no less important policy in education was inaugurated. This took form in the so-called "Smith-Hughes Act," granting Federal aid for vocational education.

The Smith-Hughes Act was approved by the President on February 23, 1917. It appropriates funds for the purpose of cooperating with the States in providing instruction in agricultural, trade, home economics, and industrial subjects and in preparing teachers of vocational branches of study. For the salaries of teachers, supervisors, and directors of agricultural subjects an initial appropriation of \$500,000 was made for the fiscal year ended June 30, 1918,

and an annual increment of \$250,000 is added until the fiscal year 1924, after which \$500,000 is added each year until an allowance of \$3,000,000 is reached in the fiscal year ending June 30, 1926. These sums are allotted to the States in the proportion which the number of their respective rural inhabitants bears to the total number of rural inhabitants of the United States. For the salaries of teachers of trade, home economics, and industrial subjects appropriations are made in like manner and amounts. The sums appropriated for this purpose are allotted to the States in the proportion which the number of their respective urban inhabitants bears to the total number of urban inhabitants of the United States. The third appropriation will reach \$1,000,000 in the fiscal year ending June 30, 1925, and is intended for preparing teachers, supervisors, and directors of agricultural subjects and teachers of trade, industrial, and home economics subjects. The allotment of this fund is made on the basis of total population.

The act creates a Federal Board for Vocational Education, which is composed of the Secretaries of Agriculture, Commerce, and Labor, the Commissioner of Education, and three citizens appointed by the President. Of the appointed numbers one must be a representative of manufacturing and commercial interests; one, of agriculture; and one, of labor. This board is charged with the administration of the act and may appoint such assistants as deemed necessary. An annual appropriation of \$200,000 is made to defray the cost of administration and of such investigations and special studies as the board may undertake.

In order to receive the benefits of the act any State must accept its provisions and create or designate a board to cooperate with the Federal board. It is also required that the State or local authorities therein, or both, expend an amount equal to that expended in the State by the Federal Government, and that plans be adopted for vocational education which are acceptable to the Federal board. The State treasurer must be designated by the legislature as the custodian of funds allotted under this act, and the State board must report annually to the Federal board in Washington. The latter is required annually before the 1st day of January to certify to the Secretary of the Treasury the amount to which each State is entitled and must report annually to Congress.

As showing something of the operation of this act, the following brief table is given. It indicates the amount allotted to each State for the fiscal year ending June 30, 1919.

Federal funds allotted to the several States for vocational education.¹

Alabama-----	\$49,765.68	Nevada-----	\$15,000.00
Arizona-----	15,000.00	New Hampshire-----	15,000.00
Arkansas-----	37,874.42	New Jersey-----	62,776.07
California-----	58,021.64	New Mexico-----	15,000.00
Colorado-----	19,273.43	New York-----	226,848.14
Connecticut-----	31,245.91	North Carolina-----	51,191.24
Delaware-----	15,000.00	North Dakota-----	17,808.99
Florida-----	18,857.55	Ohio-----	115,622.17
Georgia-----	60,948.84	Oklahoma-----	38,655.31
Idaho-----	15,000.00	Oregon-----	16,142.18
Illinois-----	137,581.93	Pennsylvania-----	186,786.00
Indiana-----	64,578.82	Rhode Island-----	19,304.07
Iowa-----	52,530.24	South Carolina-----	36,169.80
Kansas-----	39,867.34	South Dakota-----	17,708.61
Kentucky-----	53,701.68	Tennessee-----	51,011.12
Louisiana-----	39,085.00	Texas-----	91,361.88
Maine-----	17,920.34	Utah-----	15,000.00
Maryland-----	31,250.08	Vermont-----	15,000.00
Massachusetts-----	86,138.70	Virginia-----	48,288.17
Michigan-----	67,539.35	Washington-----	27,614.44
Minnesota-----	49,557.88	West Virginia-----	29,417.16
Mississippi-----	42,888.92	Wisconsin-----	55,843.72
Missouri-----	78,755.04	Wyoming-----	15,000.00
Montana-----	15,000.00		
Nebraska-----	28,014.13	Total-----	2,307,460.44

EDUCATION FOR THE DISABLED SOLDIER.

Another duty imposed on the Federal Board for Vocational Education is that of providing vocational rehabilitation for persons disabled under circumstances entitling them, after discharge from the military or naval forces of the United States, to compensation under the war-risk insurance act of October 6, 1917. This duty is imposed by the so-called "Smith-Sears Act," approved June 27, 1918. Under this act the Federal board is authorized to take the disabled man when he is discharged from the hospital, or when the Army medical authorities permit, and give him training as his needs require, taking into account, of course, his personal preference and previous training and aptitudes. The training provided is designed to restore the man as far as possible to full duty again as a soldier in civilian ranks. His instruction may take the form either of further education or adjustment for his prewar vocation or of reeducation for a new vocation in life. During the period of rehabilitation he is entitled under the law to receive \$65 or more per month, according to his circumstances. Allowances for dependents are also provided. On the part of the man the training is voluntary. If, however, he fails or refuses to follow the prescribed course of rehabilita-

¹ Federal Board for Vocational Education. Second Annual Report, 1918, p. 106.

tion which he has elected to follow, the Bureau of War-Risk Insurance may, on the recommendation of the board withhold his allowance. The expenses connected with his instruction, including the cost of books and supplies, are defrayed by the Federal board. The board is given large discretion in formulating plans, prescribing courses of study and the like. The act appropriates and makes available until expended the sum of \$2,000,000 for the purpose of carrying out its provisions.

Section 6 of the above-mentioned act also provides:

That all medical and surgical work or other treatment necessary to give functional and mental restoration to disabled persons prior to their discharge from the military or naval forces of the United States shall be under the control of the War Department and the Navy Department, respectively.

It is further provided in this section that, whenever training is employed as a therapeutic measure by the War Department or Navy Department, a plan of cooperation may be established between these agencies and the Federal board acting in an advisory capacity, and that the War and Navy Departments may cooperate in a like capacity in the care of the health of the soldier or sailor after his discharge from the military or naval forces. This section thus takes legislative cognizance of the work of rehabilitation established under the direction of the Surgeon General of the Army. In the last months of the year 1917 Surg. Gen. William C. Gorgas organized in his office a Division of Physical Reconstruction. This division seeks to secure as far as possible the full functioning again of the disabled man's physical and mental parts. Its methods, therefore, are primarily therapeutic and look to restoration to military duty, but the man's return to civil life is not overlooked. Such instruction as is provided is given prior to the man's discharge from service. The work is supported from appropriations for hospital and other health work in the Army.

MOBILIZING EDUCATIONAL INSTITUTIONS.

One of the first and most important needs of the Army, after America's entry into the war, was for additional officers. These were provided in reserve officers' training camps. A group of officer-candidates was assembled at each of these camps and given intensive training for a period of about three months, at the end of which successful candidates were awarded commissions. The first series of camps was begun in May, 1917, at 13 points in different parts of the country. Other series were held at intervals after that time. By May, 1918, numerous educational institutions had been made centers of officer training. Men of as much previous training as possible were desired, and naturally the eyes of the War Depart-

ment were turned for a large proportion of the officers needed to college graduates and students. The maintenance of units of the Reserve Officers' Training Corps at higher educational institutions was authorized by the "National Defense Act" of June 3, 1916.

"With a view to mobilizing the educational institutions of the country and their facilities for special training," the War Department announced, on February 13, 1918, the appointment of a committee on education and special training. This committee had been created three days previously by General Order No. 15. It was composed of Army officers, and an advisory committee of educational experts was added. The committee was charged with the supervision of the Students' Army Training Corps, which comprised a collegiate section and a vocational section. Units of the Students' Army Training Corps were organized at over 500 educational institutions of the country. The collegiate section consisted of regularly enrolled college students, who, on application and on meeting the physical requirements, were given the status of enlisted men and left, subject to call, in training at their respective institutions. The courses were arranged on the basis of a three-months' term and were designed for training both officer-candidates and technical experts. The War Department entered into contract with the institution for housing, subsistence, and tuition of the men of both the collegiate and the vocational section. No promise was given that a man would be left in college for any stated time, but so long as he was not called, his college education was provided by the Government. There was, however, the understanding that the call of the younger men would be deferred longer than that of men of maturer years.

The aim of the vocational section was to train men for service as trade specialists in the Army. They pursued such subjects as auto driving, auto repairing, bench woodwork, sheet-metal work, electrical work, and the like. As the courses were organized, they were to be given through a term of two months. Registrants who had a grammar-school education or equivalent trade experience were eligible for the vocational section. Induction was either by call of the local draft board, by application to the committee in Washington, or by transfer from other units.

In the last "draft law," approved August 31, 1918, legislative sanction in the following language was given to the work as planned by the Committee on Education and Special Training:

SAC. 7. That the Secretary of War is authorized to assign to educational institutions, for special and technical training, soldiers who enter the military service under the provisions of this act in such numbers and under such regulations as he may prescribe; and is authorized to contract with such educational institutions for the subsistence, quarters, and military and academic instruction of such soldiers.

It must not be supposed that all war education was intrusted to the Committee on Education and Special Training. On the contrary, the committee's activities were confined to educational institutions. Outside of these, important educational forces were "carrying on," for the Office of the Surgeon General, the Ordnance Department, the Quartermaster's Department, the Chemical Warfare Service, the Division of Military Aeronautics, the Signal Corps, the Motor Transport Corps, and the Engineer Corps, all had means of training for their respective purposes.

TRAINING SOLDIERS IN THE COMMON-SCHOOL BRANCHES.

An important branch of the Army educational system was that organized under General Order No. 45 and designated "Development battalions." These were designed for men who, because of remediable shortcomings, were at first unfit for full military duty. The fault might be either physical or mental. In the latter event, the remedy was generally instructional in character, as where a man of foreign birth or parentage was unable to speak and understand the English language, or where a native American was illiterate. These battalions were organized at all cantonments, and many thousands of foreigners and illiterates were given as far as practicable the elements of an English education.

SCHOOLS ON GOVERNMENT INDUSTRIAL RESERVATIONS.

In the spring of 1918 plans for the establishment and maintenance of schools for the children of workers employed on Government industrial reservations where munitions and accessories were manufactured for the Army were formulated in the office of the Chief of Ordnance and were later approved by the Third Assistant Secretary of War. By order of August 13, 1918, the Chief of Ordnance directed that the Community Organization Branch of the Industrial Service Section, Production Division, be charged with the organization and control of such schools. This branch was accordingly organized in the Ordnance Department, and a director and an assistant director were placed in charge. School systems have been organized or projected on reservations at or near the following places: Elmwood, N. J.; Mays Landing, N. J.; Delaware City, Del.; Tullytown, Pa.; Perryville, Md.; Charleston, W. Va.; Seven Pines, Va.; Penniman, Va.; Nashville, Tenn.; Muscle Shoals, Ala.; Sheffield, Ala.; Brunswick, Ga. The schools are supported by allotment from Federal appropriations. Superintendents, principals, and teachers are employed under the direction of the central office in Washington.

NAVAL EDUCATION.

In a manner similar to that of the Army, the Navy's educational system has undergone great expansion since the beginning of the war. In general, its system of training in war time parallels that of the Army. That is to say, men are inducted into the service in practically the same way and are given such preliminary and special training as the needs of the Navy and their previous education and aptitudes call for. By an agreement between the War and Navy Departments, the Navy was allotted, under the "draft law" of August 31, 1918, about 15,000 men per month. These received training, as circumstances determined, either in the "naval section" of the Students Army Training Corps—at over 90 educational institutions—or in the various naval-training stations and camps throughout the country. They, as well as the men of the Army, are entitled under the law to vocational rehabilitation in case of mutilation in the discharge of duty. Since the outbreak of the war, the number of cadets at the Naval Academy at Annapolis has been greatly increased by law.

ENLARGED ACTIVITIES OF THE DEPARTMENT OF LABOR.

When a state of war was declared between the United States and the German Government, the Department of Labor already included within its activities several lines of educational endeavor, particularly in connection with the work of the Bureau of Naturalization and the Children's Bureau, and after the outbreak of hostilities it was found necessary to enlarge the department's activities along various lines, including educational. Three notable agencies which touch education and which have been organized within the last biennium are the Employment Service, the Information and Education Service, and the Training and Dilution Service. Each of these offices is organized as a bureau and has a director in charge.

The United States Employment Service is an outgrowth of the general powers conferred upon the Department of Labor by Chapter 141, Acts of Congress of 1912-13, and of the more specific powers conferred upon the division of information of the department by section 30, chapter 29, Acts of 1916-17 (Immigration Act). For the fiscal year ending June 30, 1919, Congress appropriated (Sundry Civil Act of July 1, 1918), \$5,500,000—

to enable the Secretary of Labor, during the present emergency to furnish such information and to render such assistance in the employment of wage earners throughout the United States as may be deemed necessary in the prosecution of the war and to aid in the standardization of all wages paid by the Government of the United States and its agencies.

As a part of the work of this "service," the Boys' Working Reserve and the collegiate section of the Women's Division were organized. In the spring of 1918 the Boys' Working Reserve was mobilized and trained, as far as practicable, to spend their vacations in the country at farm work. Effort was also made to induce boys so employed in vacation time to return to school in the autumn. In connection with the reserve a collegiate section was maintained for the purpose of mobilizing college students in a similar manner. One of the functions of the Women's Division involves the placement of women, particularly college women, in suitable positions.

The Information and Education Service is educational in that it is an information-giving bureau. It was organized as a separate agency after the passage of the Sundry Civil Act of July 1, 1918, which appropriated \$225,000 for "information and education service." A similar appropriation in the same act was that of \$150,000 for the "training and dilution of labor." In war time it was found necessary to infiltrate unskilled labor into the industries to do a part of the work, usually simple processes, formerly done by the skilled worker. Prior to induction into such employment the prospective employee needs a short period of training. This "training and dilution of labor" is the work with which the office here mentioned is concerned.

In connection with the two older offices of the department which are in a measure concerned with education there are two notable activities of recent development. By act of June 29, 1906, the Bureau of Naturalization was charged, under the direction of the Secretary of Labor, with "all matters concerning the naturalization of aliens." Under this authorization and in pursuance of a plan formulated in April, 1914, this bureau has during the last three years sought to obtain the cooperation of public school authorities throughout the country in the Americanization of prospective citizens of foreign birth. It furnishes these authorities the names and addresses of declarants for citizenship and petitioners for naturalization for the purpose of bringing these declarants and petitioners under the Americanizing influence of the public school, and, by means of letters and otherwise, seeks to induce them and their wives to take advantage of the school opportunities afforded them. It also publishes and furnishes a manual for teachers and a textbook for the use of prospective citizens. Authority for the provision of textbooks is embodied in the Naturalization Act of May 9, 1918.

In addition to its other duties the Children's Bureau was charged with the enforcement of the act of September 1, 1916, entitled, "An act to prevent interstate commerce in the products of child labor, and for other purposes," and proceeded with the work of carrying the act into effect until it was declared unconstitutional by de-

cision of the Supreme Court of the United States rendered June 3, 1918. This decision was conclusive, rendering the so-called "child-labor law" wholly invalid and inoperative.

OTHER AGENCIES.

It is not the purpose of this review to enumerate and describe all of the Government's educational activities, nor to treat exhaustively all those that have been undertaken within the past two years. There are, however, some other activities that merit notice here, especially since they are the outgrowth of laws enacted within the period comprehended by this chapter. Among these are the training of shipyard workers and seamen under the Shipping Board, the dissemination of information and the promotion of a wholesome national spirit by the Committee on Public Information, and the conduct of propaganda for the conservation of food and fuel by the Food Administration and the Fuel Administration, respectively. From its organization the Shipping Board has sought to provide and to train as far as possible the workers necessary to build the ships provided for by the shipping law, and to man these ships after their entry into the marine service. In the planning of courses of instruction and the organization of its training system, the board has had the cooperation of the Federal Board for Vocational Education. The other agencies mentioned, particularly the Committee on Public Information and the Food Administration, have used school channels extensively for their respective purposes.

EXPANSION OF THE BUREAU OF EDUCATION.

For some years Congress has from time to time increased the appropriations made for the Bureau of Education. During the past two years these increases have amounted to \$36,760, exclusive of allowances for work among the natives of Alaska. For the fiscal year ending June 30, 1919, the total appropriation, exclusive of the sum for Alaska, is \$162,260. Increments to appropriations already provided in earlier laws include additions to the classified clerical force and more funds for the payment of traveling expenses. For the fiscal year 1918 the sum allowed for the investigation of rural education and industrial education was increased from \$35,000 to \$45,000, and a part of the latter sum was made available for school hygiene. This appropriation was raised to \$50,000 for the current year. During the same period the allowance for school and home gardening was increased from \$5,700 to \$7,500. New lines of work were authorized in 1918-19 by appropriations of \$9,000 for the "in-

investigation of elementary and secondary education, including evening schools, and the wider use of the schoolhouse in cities and towns," and \$4,300 for the "investigation of kindergarten education." Thus, by increments to its annual allowances, and by new authorizations, the Bureau of Education is continually expanding, but there remain various lines of valid endeavor which it is not yet able to undertake.

COUNCIL OF NATIONAL DEFENSE.

The act making appropriations for the support of the Army for the fiscal year ended June 30, 1917, approved August 29, 1916, provided for a Council of National Defense to consist of the Secretaries of War, Navy, Interior, Agriculture, Commerce, and Labor, and to have associated with it an advisory commission, to consist of not more than seven members, appointed by the President. Among other duties the council is charged under the act with the "coordination of industries and resources for the national security and welfare" and with the "creation of relations which will render possible in time of need the immediate concentration and utilization of the resources of the Nation." The council has accordingly sought in various ways to mobilize and coordinate America's resources, including educational facilities. Among the important agencies organized by the council are the Committee on Engineering and Education, the Woman's Committee, the Committee on Labor, and the State Councils Section, all of which have done appreciable service in collecting data and obtaining the cooperation of the educational forces of the country. The act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1919, appropriates \$400,000 for the work of the council.

STATE LEGISLATION.

Since there have been 53 regular sessions of legislatures and a number of special sessions within the last two years, the volume of school legislation enacted in that time has been very large. It is safe to estimate the number of bills enacted into laws affecting education to have been more than 1,000. Whatever the exact number may be it is obviously too large to permit extensive treatment of every act, or even of every important act, in a brief survey of the kind attempted here. Moreover, brief digests and discussions of these acts are presented elsewhere in publications of the Bureau of Education. In this chapter the effort is made to consider the more significant educational movements and to show their progress through the enactment of law.

GENERAL STATE ADMINISTRATION.

The constant state of flux and change of statutory law is not so apparent in legislation affecting general State administration as it is in the details of the school system, or with the smaller units of school control. There are, however, some recent laws affecting State departments of education and general State school policies that merit especial notice. Among these are acts relating to the organization and powers of State boards of education and the powers and duties of superintendents of public instruction and provisions for State commissions for various purposes. An Illinois act of 1917 reorganizes the civil administration of that State by creating nine administrative departments. Among these is a "department of registration and education." In addition to the director, there are created in this department the offices of assistant director and superintendent of registration and education and a board to have control of the normal schools. This board consists of nine officers of the several departments, the director of registration and education, and the superintendent of public instruction. All offices created by this act are filled by appointment by the Governor for terms of four years; unless otherwise provided in the act. The department of registration and education succeeds to the powers and duties of the State board of education. Among other duties it is charged with the conduct of examinations of applicants for licenses to practice various professions and vocations, and with investigations and the dissemination of information respecting the resources, zoology, botany, entomology, geology, and water supply of the State.

An act of the legislature of Kansas (Ch. 297, Acts of 1917) provides for the management of State institutions by a State board of administration. This board consists of three qualified electors appointed by the governor with the consent of the senate; the governor is himself a member and chairman. The appointed members are to serve for terms of four years. Their salaries are \$3,600 each, and their entire time must be devoted to the duties of the board. Under the provisions of this act, the board of directors of the several educational, benevolent, penal and correctional institutions of the State are abolished, and the State board of administration succeeds to their powers and duties.

For some time there has been a distinct tendency in this country to replace ex-officio boards, or boards made up wholly or in large measure of incumbents of other offices, with members chosen directly from the people. Utah made a change in its State board of education in accordance with this tendency in 1915, and in 1917 (Ch. 478) Wisconsin did likewise. In the latter the board formerly consisted of the governor, secretary of state, superintendent of public in-

struction, one person appointed by the board of regents of the State university, and one appointed by the regents of the normal schools. By the act of 1917 the board is constituted as follows: Governor, superintendent of public instruction, one member appointed by the regents of the university, one member appointed by the regents of the normal schools, and five persons appointed by the governor with the consent of the senate. The terms of the five appointed by the governor are five years and are overlapping, one member being appointed each year. The board is charged with the management of of the fiscal and business affairs of the educational agencies of the State.

The State board of education of Wyoming, as at present constituted, is a board in which the only ex-officio member is the superintendent of public instruction. This officer and six members appointed by the governor compose, under chapter 120, Acts of 1917, the board of education of that State. The powers and duties of the board are outlined as follows: To have general control and supervision of the public schools, to fix standards for the courses of study in elementary and high schools, to make rules for the certification of teachers, to conduct educational investigations, to have general oversight of vocational and other special schools receiving State aid, to advise the trustees of the university with respect to the normal department of that institution, to assume the powers and duties of the State board of examiners of applicants for teachers' certificates. The board is also authorized to appoint a commissioner of education who is made its executive officer.

By an act of 1917 Tennessee provided that at least three of the nine members of its State board of education must be chosen from the minority political party.

Another line along which legislatures have approached State administrative problems in recent years is the creation of commissions to make special studies and reports on educational conditions or particular phases of education. The greater number of these commissions has been created for the purpose of making recommendations with regard to codifying the school laws and eliminating contradictions and inconsistencies. That such a codification is needed in many States is apparent to anyone who examines carefully the pamphlets of school laws published by State departments of education. Nor is this need unknown to State school administrative officers. In the preface to the "Georgia School Laws and Decisions," published by that State's department of education, Superintendent M. L. Brittain says:

By reason of recent legislation many contradictions occur in the Georgia school laws. * * * For this reason it has been thought wise to publish

[only] extracts of our more important and most necessary educational legislation until the right is granted to arrange the laws changed, omit those practically repealed, and to print a complete and thorough school code.

The legislature of 1918 provided for a commission to codify the school laws of Georgia.

The Virginia Legislature of 1918 took a similar step and provided for a "commission to study educational conditions in Virginia and elsewhere and to report to the next general assembly its findings, together with recommendations for a revision of the school laws and amendments to Article IX of the constitution."

In 1917 the legislatures of Arizona, Delaware, and North Carolina provided for commissions to codify their school laws. The usual provision in enactments of this character is for a commission to study school conditions in the State and elsewhere and to make to the next session of the legislature a report embodying recommendations as to legislation. There is, however, a difference in the amounts of money made available for the purposes of commissions. This is important, for the study should be thorough, and sufficient time and energy should be devoted to the report and the draft of the proposed school code to make them thoroughgoing.

Another sort of commission created in 1917 was that provided by an act of the Michigan Legislature for the purpose of making investigations and submitting reports and recommendations with regard to child welfare.

Except as already indicated in connection with State boards, the chief State school officer, called "superintendent of public instruction" in most States, has been the subject of only minor legislation within the past two years. This legislation has concerned chiefly the manner of choosing State superintendents and their compensation and assistants. In Iowa, prior to 1917, the superintendent was appointed by the governor, but the legislature of that year (ch. 318) repealed this provision and provided instead for his election by the qualified electors. A law of Nebraska enacted in the same legislative year (ch. 37) provides for the nonpartisan nomination and election of the superintendent of public instruction, county superintendents of schools, and regents of the State university. The State of Idaho has had since 1913 both a superintendent of public instruction and a State commissioner of education, the latter office having been created by statute in that year. But since the office of superintendent was provided for in the constitution, the effort to substitute a commissioner for a superintendent involved the amendment of the constitution so as to abolish the latter position. Accordingly the necessary amendment was proposed by the legislature of 1917.¹ A new law of

¹ At the November election, 1918, this amendment failed of ratification.

Maryland enacted in 1918 requires the State superintendent to be a graduate of a standard college.

Acts of Connecticut and Michigan passed in 1917 provide for an assistant secretary of the State board of education and a deputy superintendent of public instruction, respectively. The act of Michigan also added two assistant superintendents. Enactments of Arizona and Delaware had the effect of increasing the compensation of the chief school officer of those States. South Dakota in the same year fixed by law the allowance for expenses of the State superintendent. Among other duties the office of director of State institutions, created in Vermont by act of March 2, 1917, includes the supervision and control of the Vermont Industrial School and the Vermont State School for Feeble-minded Children.

COUNTY ADMINISTRATION AND SUPERVISION.

For several years the county as a unit of school administration has been much in the minds of educators, and the subject has been much discussed both among school men and in State legislatures. In general, it may be said that there are three schools of thought with regard to local units of school administration: First, there are those who favor the county as the unit, and in strong form; that is to say, they would submerge the district as constituted in many States and make the county as effectually a unit of school control and supervision as the city generally is. A second group would have the "county unit" in modified form, leaving to each community a measure of local autonomy; and then there is the third group, which is averse to abandoning the district system or township system, according as one or the other of these two is preferred. Whatever may be the final outcome there is without doubt a trend toward the "county-unit" system at the present time. In his book, "The Rural Teacher and His Work," Dr. H. W. Foght classifies 19 States¹ as having adopted the county plan of organization and mentions a twentieth State² which permits its less-populous counties to adopt this plan by vote of the people. As between the advocates of what has been called the "pure county type" and those who prefer a modified form, results so far attained are indecisive. Dr. Foght classifies 10 States as belonging to the "mixed or semicounty type," though he himself would appear to favor the stronger organization.

Within the biennium treated here, the most notable change to the county system was that made in New Mexico in 1917. By act of the legislature (ch. 105) that State provided for a county board

¹ Alabama, Arizona, California, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, New Mexico, North Carolina, Ohio, South Carolina, Tennessee, Texas, Utah, Virginia, and Washington.

² Nebraska.

of education of five members to consist of the county superintendent of schools and four qualified electors appointed by the district judge. This board is charged with the administration of schools throughout the county, excepting those in incorporated cities, towns, and villages. In general, this law of New Mexico may be regarded as representing the modified form of county administration. In the matter of finances the State and county funds are apportioned to school districts on the basis of the school census, and additional funds may be provided by district taxation. The expenditure of rural funds, however, is administered by the county board. Teachers are employed by the district board of directors with the approval of the county board. All equipment and supplies for rural schools, whenever possible, must be purchased by the county board in quantities and at wholesale prices. Rural school property is vested in the county board, and districts may be changed, consolidated, or abolished by the same authority. County superintendents remain, as formerly, officers elected by popular vote. Rural high schools, as well as rural schools of elementary grade, are subject to the control of the county board.

No other changes of great importance were made in county administration in 1917 or 1918. However, in North Carolina an act of the former year provided that in counties where members of the county boards of education were elected by the legislature candidates for membership in boards should be nominated at the party primaries or conventions and that the legislature should elect members from the nominations so made. In a Maryland act of 1918 district school boards are authorized to reject assignments of teachers to their respective districts, but the county superintendent is not required to make more than three nominations for the same position. In adopting this provision Maryland veered back slightly toward the "semicounty type."

Laws affecting county superintendents of schools have within the past biennium generally taken the form of provisions for increases in salaries and for deputy or assistant superintendents. Among the States which raised the salaries of their county superintendents were Arizona, Colorado, Delaware, Kentucky, Pennsylvania, and South Dakota. Kansas and Minnesota provided increases in the larger counties. The payment of the expenses of superintendents was provided for in Montana, Nebraska, and New Jersey. The law of the last mentioned, as amended in 1918, provides for the payment of the expenses of the superintendent, upon the presentation of proper vouchers, but such expenses must not exceed \$125 in any quarter year. Deputy or assistant county superintendents were provided for in 1917 in Arizona, Iowa, Kansas, Montana, and North Dakota. A South Dakota act of the same year provided for the

nonpartisan election of superintendents. Kentucky, at the last session of its legislature (1918), repealed an older law which required an examination for certification for eligibility to the office of county superintendent. In lieu of this provision it is now provided that any person holding the degree of bachelor of arts in education, bachelor of science in education, an advanced certificate issued by the University of Kentucky, or an advanced certificate issued by the State normal schools shall be eligible to hold the office.

THE SCHOOL DISTRICT.

Perhaps the most notable legislation under this head within the last two years was that enacted in New York in 1917. By the enactment of chapters 328 and 786 that State revised and reorganized its whole system of local school administration. The former act affected villages and rural communities, and the latter concerned city boards of education. The act affecting the smaller communities had the effect of abolishing all school districts as units of school administration and substituting therefor a larger unit, the township. This act, however, was repealed by chapter 199, Laws of 1918, and the old district system was accordingly restored. Chapter 786 was entitled "An act to amend the education law, by providing for a board of education in the several cities of the State." Under its provisions a city formerly having nine members or a small number on its board of education continues to have the same number, but in all other cities, except New York and newly created municipalities, the number of members is reduced to nine. New York City, which formerly had a board of 46 members, now has only seven, and boards of newly created municipalities will have five members. Where formerly elected, boards will be elected under this act, and where formerly appointed they will be appointed still. In general, this law leaves the functions of city administrative agencies substantially as they were prior to its passage. Its effect, in the main, is to repeal numerous special acts and to make more uniform the State's system of city school administration. In the legislature of 1918 it escaped the fate of the "township act," having been changed only by minor amendments.

CONSOLIDATION.

The movement for consolidated rural schools goes on without abatement; in every legislative year it is the subject of extensive legislation. Few now deny that, whenever practicable, the one-room rural school must give place to a larger, better-equipped, and more thoroughly graded seat of instruction. In States having county administration consolidation is easily effected through the powers of the

county board of education. In New England and a few States elsewhere a method of consolidation subsists in the township system. Where the district system prevails, laws specifically designed to effect a union of two or more districts are necessary. In view of this fact one looks to States having the district system for new laws relating to consolidation, and it is there that most of them are found. However, practically all States now have laws on the subject, and current enactments are generally of the nature of amendments to existing statutes. Among the States which have within the last two years changed their consolidation laws are Illinois, Iowa, Kentucky, Michigan, Oklahoma, South Dakota, Indiana, Kansas, Mississippi, and Wisconsin. In the first six of these the new enactments relate chiefly to the manner of consolidating, which is usually effected by vote of the people in the districts concerned. In Indiana, the transportation of pupils was the subject of legislation. There the township trustee is now required to provide transportation for all children who reside over 2 miles, and for children between 6 and 12 years of age who reside over 1 mile, from school. A Kansas act authorizes contracts with parents or other custodians to transport their own children. Mississippi in 1918 authorized school trustees of independent districts to provide transportation for children residing over 2 miles from school. A Wisconsin act of 1917 prescribes conditions on which State aid for transporting pupils will be granted.

PUBLIC-SCHOOL SUPPORT.

Two phases of school financing are prominent in present-day legislation. These are (1) the general tendency to increase tax rates for school purposes and (2) the effort to shift the burden of school support more from the local community to the larger units, State and county, or otherwise to equalize educational opportunities. It is not practicable nor desirable to outline here all recent provisions of funds for public schools. There is scarcely a State which has not amended within the past few years its law providing school revenue, and in nearly all cases increases in taxes have been allowed. Among the States which have made provision for such increases within the last biennium are Arkansas, California, Delaware, Florida, Idaho, Iowa, Kansas, Montana, Nebraska, New Jersey, North Carolina, Oklahoma, Oregon, South Carolina, Texas, and Virginia. It is worthy of note that among these States are some that provide for county taxation for educational purposes. The Legislature of Florida, for example, proposed in 1917 an amendment to the State constitution¹ which is designed to require each county to levy on all taxable property therein a school tax of not less than 3 mills nor

¹ Ratified by the voters at the November election, 1918.

more than 10 mills on the dollar. An Idaho statute enacted in the same year requires the board of county commissioners to levy a tax for general school purposes which shall be sufficient to raise a minimum of \$15 per capita of children of school age. An Oklahoma act provides a county tax of 1 mill on the dollar.

There is a sense in which the "county-unit" propaganda, the tendency toward increased State appropriations and taxation for education, and the advocacy of Federal aid to the State school systems may all be regarded as parts of the same effort. By this it is meant that all have their roots in the recognition of the unaided local community's inability to provide proper school facilities and of the larger unit's duty in the matter. That a larger proportion of the burden of school support will be taken from the school district and assumed by the State and county—and perhaps by the Federal Government—now seems certain; the trend of legislation is without doubt in that direction. A State appropriation for rural schools made in Texas in 1917 amounts to \$1,000,000 per annum. An amendment to the constitution proposed by the same legislature would provide a State tax of 35 cents on the hundred dollars.¹ By an act of the same year, Delaware provided an annual appropriation of \$250,000, out of the proceeds of the State's income tax, "for the benefit of the public schools." The Legislature of New Mexico provided for a State school tax of one-half mill on the dollar.

Legislatures of 1918 were no less generous with State provision of school funds. The Louisiana General Assembly proposed five amendments to the constitution,¹ all of which were designed to make more stable the State's system of school support and, particularly, to shift the burden more to the county and the State. Virginia increased from 10 to 14 cents on the hundred of property valuation the State tax levy and added \$100,000 to its annual appropriation for school purposes. In the Georgia Legislature the annual appropriation was increased \$300,000, and, had the bill become a law as it passed the lower house, the increase would have amounted to \$1,000,000. Massachusetts and Maryland also showed tendencies to add to the State's share in school support. By an act of the legislature of the former, State aid is granted to high schools in towns having fewer than 500 families and a comparatively low average of property valuation.

What is popularly known as "State aid" is a common form of State participation in school maintenance. This, in general, serves two purposes: (1) It is extended to the weak district to enable it to provide adequate, or more nearly adequate, common-school facilities; and (2) it is granted in some States to any district to encourage it

¹ Ratified by the voters at the November election, 1918.

to provide desirable types of special instruction, such as agriculture and home economics. Among the States which have recently enacted State-aid laws, or amended those already in force, are Connecticut, Delaware, Missouri, Rhode Island, South Carolina, Utah, and Wisconsin.

IMPROVEMENT OF THE TEACHING PERSONNEL.

Under this head are included the several elements which make for the development of efficient instruction. Among these elements are adequate training for the prospective teacher, higher salaries and better opportunities in the teaching profession, more contentment and security in employment, and better social conditions amid which the teacher may do his work. State laws looking to all these ends are to be found in recent acts of legislatures. With regard to the training of teachers some noteworthy acts have been passed within the past year or two.

A Massachusetts enactment of 1918 authorizes the State board of education to expend not exceeding \$4,000 a year for the purpose of aiding pupils in the State normal schools. In New York an act of the same year standardizes the compensation of the faculties of the State College for Teachers and the normal schools. Under the provisions of this act a salary schedule is prescribed. The salaries of the president and the dean of the college for teachers are fixed at \$6,000 and \$4,500, respectively, and the principal of each normal school is to receive the same pay as that of the dean of the college. The compensation of the professors, assistant professors, instructors, and assistant instructors in the college for teachers and of the heads of departments, assistants in departments, and critic and model teachers in the normal schools begins at a prescribed minimum for each class and proceeds by annual increments to a maximum which is likewise prescribed. According to this schedule the maximum for professors in the college is \$4,000, and for the head of a department in a normal school, \$3,000. An act passed in Nebraska in 1917 provides in the normals of that State an "elementary course" and an "advanced course" for teachers of rural schools. The Legislature of Arkansas in the same year authorized the State normal school to issue special certificates to teachers of rural schools and to persons completing the two-year course in home economics. A Washington act established extension departments in the normal schools of that State. Increases in funds for the maintenance of institutions for the training of teachers were provided in many States.

Another type of teacher training—a type designed chiefly to prepare persons to teach in rural communities—is that found in high schools and now become widespread in the country. Twenty-five

States have laws providing for such training. Among these are two, Montana and Wyoming, whose legislatures made the provision in 1917. The usual law on this subject authorizes approved four-year high schools to offer training courses and to grant diplomas upon which teachers' certificates of elementary grade may be issued without further examination. These laws also generally provide State aid for the payment of instructors in the normal branches.

Teachers' salaries, a constant subject of legislation, occupied the attention of legislative assemblies in 1917 and 1918, as well as those of previous years. In fact, the outbreak of the war and consequent rise in wages elsewhere made more acute the problem of retaining teachers in their positions at prevailing rates of pay, and this condition could hardly escape the attention of legislatures. The two usual forms of salary legislation, provisions for increased funds for tuition purposes and minimum-salary laws, were in evidence. Of the first of these, note has already been made under the heading "public-school support." Among the States which prescribed minimum amounts that may be paid to teachers or which amended existing statutes on the subject were Massachusetts, Delaware, Pennsylvania, Maryland, Kentucky, and Wisconsin. The usual law of this character prescribes a minimum monthly stipend for each grade of teachers, particularly teachers of the elementary grades. Thus Pennsylvania in 1917 (No. 425) provided that the holder of a provisional certificate shall receive not less than \$45 per month; the holder of a professional or a normal school certificate, not less than \$55; and the holder of a permanent certificate or final normal school diploma, not less than \$60. The object of the minimum salary law is twofold: It protects the teacher, especially the beginner, from the penuriousness of local school boards, and it prevents the bargain-driving board from going into the market and buying the cheapest possible teaching service. In both aspects it has a tendency to improve the character of instruction in the public schools.

Two kinds of laws tend to give the teacher a feeling of assurance and contentment, a desirable state of mind in a public servant so poorly paid. These are popularly known as "tenure laws" and "pension laws." Of the former there are as yet few on the statute books of the country, that of Massachusetts being among the more notable, but teachers' associations and like agencies are continually furthering the propaganda, and legislatures are brought more and more to consideration of the matter. It should not be the purpose of a tenure law to make secure in his or her position the inefficient teacher, but it is desirable that the efficient teacher be relieved, after a reasonable period of probation, of the burden of having to stand annually for reelection, and that on the school board should be placed

the burden of showing cause why any teacher's employment, after the period of probation, should be discontinued.

Many laws providing for the retirement of superannuated teachers are now in force. Thirty-seven States have such laws applying to the whole or some part of their areas. The most recent development in this field of legislation is the effort to put retirement systems on a sound actuarial basis. The acts of Connecticut and Pennsylvania passed in 1917 are representative of this effort.

Among the laws designed to improve the social environment of the teacher are those which provide for "cottages" or other homes for teachers, particularly in rural sections of the country. A few States now make provision for such cottages. Among these are Illinois, Tennessee, Louisiana, Texas, Nebraska, and Washington. The most recent addition to this group was Mississippi, which in an act of 1918 authorized independent school districts to levy a tax for the purpose of erecting teachers' homes. The provision of teachers' homes in connection with schoolhouses would seem to forecast the coming of a rural-school plant which shall consist not merely of a building for sheltering the pupils during the hours of instruction, but also of several acres of land, a dwelling, a barn, and other equipment suited to rural life and rural community purposes. There is in the country a well-defined movement which is working to this end.

THE CERTIFICATION OF TEACHERS.

Aside from the general tendency to raise the requirements of qualification to teach, there are two or three other aspects of teacher-certification which are worthy of note. Perhaps the most significant feature of recent legislation relating to this subject is the large number of provisions for special certificates. These are of various kinds, as for manual training, agriculture, industrial subjects, household economy, physical training, kindergartens, and classes for special types of children. Many legislative acts of recent years have provided for the certification of instructors in special branches. California, for example, amended its law in 1917 (ch. 699) so as to authorize county boards of education to issue special certificates to teachers of deaf and atypical children and of classes in citizenship, oral expression, library craft, commercial Spanish, and vocational guidance. Household economy is a subject which is prominent in laws providing for certification in special branches or classes. The tendency would seem to be to require of full-time teachers in this department graduation from a standard high school and the completion of a two-year course in home economics in addition thereto. Thus Michigan, by act of 1917, requires the completion of a two-year course in the subject, such course to be completed in the University.

of Michigan, any State normal school, any college incorporated under the laws of the State, or any institution approved by the superintendent of public instruction.

The certification of kindergarten teachers is another subject of considerable legislation. Some States, in providing for the establishment and maintenance of kindergartens, include in the law requirements of teachers. Specialists in this branch of education hold that a kindergarten teacher should have completed a four-year course in high school and at least a two-year course in a training school, and the tendency in legislation appears to be working to this end. Maine, in 1917, provided that a kindergarten teacher must have completed at least a two-year course in kindergarten training and received a certificate or diploma from a training school approved by the State superintendent of public schools.

Another significant feature of recent certification laws is the provision for accrediting approved college and university diplomas and teachers' credentials issued in other States. Most States now have legal provisions of this character. Among the more recent laws on the subject are those of North Carolina and Florida, enacted in 1917, and that of Mississippi, enacted in 1918.

THE SCHOOL TERM.

In Bulletin, 1916, No. 42, "Minimum School-term Regulations," published by the Bureau of Education, it was shown that 44 States had at that time established by law a "minimum term of from 60 to 180 days' schooling for each organized school district." The four States named as having no such legal provision were Alabama, Georgia, Louisiana, and Rhode Island. Since, in the first three of these, the county-unit system of school administration prevails and county boards of education are authorized to distribute State and county funds, from which school support is largely derived, to local districts according to their respective needs, the requirement as to a minimum term there is not so essential as in some other States. In Rhode Island, where the public schools are already generously supported, the average school term being longer than that of any other State, minimum-term regulation would appear to be unnecessary.

In view of these facts, minimum-term legislation enacted within the last two years must of necessity have partaken largely of the nature of amendments to older laws. There have been, however, some noteworthy enactments of this nature. Nebraska, by act of 1917, increased from seven to eight months the length of term required of any district having between 20 and 75 persons of school age and fixed at not less than that length the term for any other

district when its school can be maintained on a tax of 15 mills added to funds received from the State. North Carolina in the same year provided for an annual county tax to aid districts in maintaining school for not less than six months. Reference has previously been made to an increase of \$100,000 in the State appropriation for school purposes in Virginia. In order to secure the best possible results from the increases provided in State funds, the legislature attached certain conditions to the distribution of the money accruing under the appropriation act. One of these conditions is that, in order to receive the benefits of this distribution, the district must maintain its schools for an average of seven months in the year.

COMPULSORY SCHOOL ATTENDANCE.

The most significant attendance law enacted in this country within the last decade was that passed by the Legislature of Mississippi in 1918. Its significance lies in the fact that every one of the 48 States now has a statute requiring attendance at school, for Mississippi's enactment was the last of the series. All of the States are now committed to the policy of requiring children to attend school for some period of their lives and for all or some part of the school term. The problem is no longer one of securing initial legislation in States not having attendance laws, but rather concerns the extension of the application of existing laws and otherwise making them more effective.

Reaching the last of a series conduces to retrospection. The period through which compulsory attendance was extending over the country—"from the Atlantic to the Pacific and from the Great Lakes to the Gulf"—was of 66 years' duration. The brief table presented below shows the years in which the several States enacted their initial laws on the subject:

Date of enactment of compulsory attendance laws.¹

Massachusetts.....	1852	Wyoming.....	1876
New York.....	1853	Ohio.....	1877
District of Columbia.....	1864	Wisconsin.....	1879
Vermont.....	1867	Rhode Island.....	1883
New Hampshire.....	1871	Illinois.....	1883
Michigan.....	1871	Dakota.....	1883
Washington.....	1871	Montana.....	1883
Connecticut.....	1872	Minnesota.....	1883
New Mexico.....	1872	Nebraska.....	1887
Nevada.....	1873	Idaho.....	1887
Kansas.....	1874	Colorado.....	1889
California.....	1874	Oregon.....	1889
Maine.....	1875	Utah.....	1890
New Jersey.....	1875	Pennsylvania.....	1893

¹ U. S. Bureau of Education, Bulletin, 1914, No. 2, p. 10, as revised to date.

Date of enactment of compulsory attendance laws—Continued.

Kentucky -----	1896	Oklahoma -----	1907
Indiana -----	1897	Virginia -----	1908
West Virginia -----	1897	Arkansas -----	1909
Arizona -----	1899	Louisiana -----	1910
Iowa -----	1902	South Carolina -----	1915
Maryland -----	1902	Texas -----	1915
Missouri -----	1905	Florida -----	1915
Tennessee -----	1905	Alabama -----	1915
Delaware -----	1907	Georgia -----	1916
North Carolina -----	1907	Mississippi -----	1918

This table shows only one phase of compulsory attendance—the time of its introduction into each of the several States. Another and perhaps more important phase is its growth in public favor after embodiment in law. This can not be shown so graphically. The usual course of the compulsory attendance movement in a State is through its embodiment in law and on into a period of extension of application and the adoption of more effective means of enforcement. Thus North Carolina enacted its first attendance law in 1907, made State wide its application in 1913, and extended the age limits in 1917.

The new law of Mississippi becomes applicable in a county or independent district only by an approving vote of the qualified electors residing therein. It fixes the age limits at 7 and 14 and requires attendance for at least 60 days in each year. Other noteworthy attendance laws of 1918 were a Massachusetts act further regulating the maintenance of county truant schools, a Kentucky act extending to magistrates' and police courts' jurisdiction in cases arising under the attendance law, and a Virginia act making its requirements State wide in application. Important laws were enacted in 1917 by the legislatures of Arkansas, Connecticut, Michigan, New York, North Carolina, North Dakota, Rhode Island, and South Dakota. In Arkansas the requirement is extended to the entire State; in Connecticut, a State "prosecuting agent" is provided to enforce the law; in Michigan, private and parochial schools are required to make reports; in New York, the number of days of required attendance each year is increased from 160 to 180; in the other States mentioned the age limits are extended in one way or another.

HEALTH AND SANITATION.

Reference is made elsewhere in this chapter to some wholesome effects of the war upon educational legislation. Without doubt the outbreak of hostilities in Europe and the accelerated propaganda for "preparedness" in this country gave strong impetus to physical training in the public schools. This is evidenced by the passage of the laws of New York and Louisiana in 1916, and by the adoption early in 1917 of provisions for physical training in all schools or

for military training in high schools, or for both, in Arizona, Indiana, Nevada, New Jersey, Oklahoma, and Oregon. Since the entry of the United States into the war, California, Delaware, Michigan, Rhode Island, and Maryland have enacted similar laws. The law of Maryland was passed in 1918 (ch. 269). According to its provisions, physical training must be provided in all public schools and schools receiving State aid. The State board of education is authorized and directed to regulate such training and to appoint a State supervisor of physical training and such assistants as may be deemed necessary. With respect to recent laws providing for military science and tactics in secondary schools, it may be noted that in only two States, New York and Arizona, are the provisions made mandatory in relation to both school authorities and high-school students. In New Jersey, the State board of education is authorized to make the requirement that military training be given in the high schools. Without regard to military training in high schools, the following States now provide by law for physical training in the common schools: California, Delaware, Illinois, Maryland, Nevada, New Jersey, New York, and Rhode Island. All of these, except Illinois, which enacted its law in 1915, have made the provision within the last two years.

The physical examination of school children, which had its beginning in San Antonio in 1890 and attained its earliest high degree of development in Boston in 1894, is now provided in some form in all States, though there are still a few which have no specific law on the subject. Recent laws are concerned with the extension of the practice and with the provision of kindred activities. An act of the New Hampshire Legislature of 1917 requires the school board of every city, union, special or town school district to submit to the qualified electors the question of providing medical inspection of schools. A Nevada act of the same year requires teachers to make examination of school children to ascertain if they are defective as to sight or hearing, have diseased teeth, or are addicted to mouth breathing. North Carolina and North Dakota provide for medical inspection by county authorities. In Wisconsin teachers are now required by law to send insanitary pupils home. Pennsylvania and Rhode Island, under acts of 1917, provide for the professional treatment of certain pupils—the former for those having defective eyes or teeth and the latter for those having defective teeth. In 1918 New Jersey authorized the maintenance of dental clinics for indigent children, and Virginia authorized county boards of supervisors to appropriate county funds for the purpose of providing medical inspection of school children and for the employment of nurses to visit schools and homes.

The regulation of schoolhouse construction and the prevention of the common use of drinking cups and the like were likewise sub-

jects of legislation in 1917 and 1918. Vermont and Washington in the former year enacted laws designed to protect school children from accidents caused by automobiles. Vermont now requires within 200 feet of a schoolhouse the sign, "Two hundred feet to a schoolhouse." In Washington the sign, "School, slow down," must be placed within 100 yards of each school. A few States regulated the construction of fire escapes, and California and Arizona prohibited the common use of drinking cups.

HIGH SCHOOLS.

High-school laws enacted within the last two years concern chiefly the extension of secondary education. As seen in legislation this extension presents three noteworthy aspects: (1) The general tendency toward universal high-school education; (2) legislative recognition of the "junior high school"; and (3) provision for the "junior college." The first of these is evidenced by the recent enactments of a number of States. In 1917 New Hampshire, Michigan, Kansas, and Montana provided for the payment of the tuition fees of pupils of secondary grade whose home districts were not providing adequate facilities for pupils of their attainments. In the first two of these the tuition fees are paid by the district, in the latter two the county bears the burden of payment. In several other laws authority for the establishment and maintenance of high schools is conferred. A Tennessee act of the same year (chapter 96) reorganizes generally the secondary schools of that State. Under the provisions of this act elementary schools consist of the first eight grades, and high schools may be either two-year, three-year, or four-year schools. The courses of study are prescribed by the State board of education. Without affecting four-year schools already established, the county high-school boards may establish a sufficient number of two-year and three-year courses to meet the needs of rural communities. A county tax of one-half mill is authorized for the promotion of secondary education. The county court elects the high-school board. An Illinois act of 1917 requires all that part of a county not in a school corporation maintaining a four-year high school to be organized as a "nonhigh-school district" for the purpose of levying a tax and paying the tuition fees of high-school pupils residing therein.

The junior high school, which is now widespread in the country, has received specific legislative recognition in Vermont, California, and Michigan. In many States specific legal provision for such schools is unnecessary, since they may be provided under authority of existing law. The "junior college" is a later development in secondary education. It consists usually of an extension of the four-year course to include two additional years, which correspond in general to the freshman and sophomore years in college. Three

States, California, Kansas, and Michigan, made provision for junior colleges in 1917. The Kansas act (ch. 283) provides for a two-year course in advance of the regular course approved by the State board of education and applies to cities of the first and second classes and to county high schools. This extension, however, must have the approval of the qualified electors voting at an election. A tax of 2 mills in a city or one-tenth mill in a county may be levied to carry out the purpose of this act.

In 1918 three States enacted important high-school laws: Massachusetts granted State aid for secondary education in the smaller towns; Maryland added to its system a third class of high schools; and Virginia authorized schools of two, three, or four rooms to give instruction in secondary subjects, if approved by the State board of education.

SPECIAL CLASSES FOR ATYPICAL CHILDREN.

More than three-fourths of the States now have institutions to which feeble-minded youth may be committed and given training suitable to their capacities, and other States are, from time to time, being added to this group. Thus Texas provided for a State "farm colony" for the feeble-minded in 1915, and South Carolina made similar provision in 1918. It would seem, therefore, that atypical children of the type commonly called "institutional cases" are soon to be provided for by law, but the higher grades of subnormality, such as pupils retarded from one to three years in their studies, have received less legislative attention. There are, however, some signs that provision for these higher grades may be made in the near future. Already special classes for "backward children" are widely maintained, but this provision needs encouragement and direction. A few States, as New York, New Jersey, Wisconsin, and Minnesota, make special legal provision for subnormal children.

The New York law was enacted in 1917 (ch. 533). It directs the board of education of each city, union free school district, or common-school district to ascertain the number of children in attendance upon the public schools therein who are three years or more retarded in mental development and requires the board of each city or union free school district in which there are 10 or more such children to establish special classes for them. Any school corporation having fewer than 10 such children may contract for their instruction in another city or district maintaining classes as provided by this act. An amendment of 1918 authorizes boards to contract with approved institutions in lieu of organizing special classes. A Wisconsin act of 1917 authorizes city and village districts, with the approval of the State superintendent, to establish and maintain classes for "ex-

ceptional persons of school age." A State is provided for, and State aid is given one-third of the salary of each teacher. \$300 of State funds may be paid to a

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CIVIC AND PATRIOTIC INSTRUCTION

The enactment of laws designed to provide instruction in patriotism affords another example of the impulse given to school legislation by the European war. Laws enacted for this purpose have generally taken the form of a requirement that patriotic instruction and exercises be incorporated in the school curriculum and, in the absence of an earlier law on the subject, provision for the display of the United States flag on or near each schoolhouse. Massachusetts and Minnesota, by acts of 1917, provided for training in the duties of citizenship; and in the following year New York and Texas made provision for patriotic instruction. In New York an earlier law left to the option of the local school board the inclusion of patriotic lessons in the curriculum. The new law requires instruction in patriotism in all schools, both public and private. The Texas law, enacted at a special session of the legislature in 1918, requires every public school-teacher to devote at least 10 minutes each school day to instruction designed to inculcate "intelligent patriotism."

About three-fourths of the States now require the display of the United States flag on or near every public school building. By act of April 21, 1917, Florida required the display of the flag on school-houses, and in 1918 Maryland and Texas enacted similar laws. There remain 10 States of the South which have no law on the subject, but the recent enactments mentioned here would seem to indicate that all States may soon have legal provision for the display of the flag.

THE ELIMINATION OF ILLITERACY AND THE AMERICANIZATION OF ALIENS.

In some aspects the immigrant and the illiterate native present to the American people the same problem: Both are civically unadjusted, both are in need of education more or less elementary in character, and in both cases it is in large measure the adult who makes the problem. Still another likeness appears in the fact that the same kind of school, the evening school, will either serve the purpose of Americanizing the alien or afford instruction for the illiterate native.

Within the period comprehended by this review several States have enacted laws looking to the Americanization of the alien and the elimination of illiteracy. The custom in some of the Southern States of conducting "moonlight schools" and like activities for

States, the action of illiterate persons is growing. In a few States these colleges are conducted under the direction of State "illiteracy commission." In addition to those already established, commissions of board nature were created in Mississippi in 1916 and in Arkansas in 1917. No State appropriation, however, was made in either case. This was in accord with past practice, for initial acts creating these commissions have generally carried no appropriation, the commission being left to look to private benefaction for support. A second step in the procedure, however, has been reached. In 1917 North Carolina and in 1918 Kentucky, each appropriated \$25,000 annually for the work of reducing illiteracy within their respective borders. Thus the States are beginning to take more vigorous hold of the problem.

The legislature of New York in 1918 passed three acts designed to cure the malady of illiterate citizenship in that State. An act known as the "Lockwood law" authorizes the establishment of institutes in the normal schools and in cities for the purpose of training teachers to give instruction to adult illiterates. A second act, the "Robinson law," requires attendance at either day or evening school of all persons between 16 and 21 years of age who do not possess such ability to speak and write the English language as is required for completing the work of the fifth grade of the elementary school. A third act requires the maintenance of evening schools in cities of the first, second, and third classes, and in union free school districts under certain prescribed conditions. The legislature of Arizona, at a special session in 1918, provided for "night schools" in districts "where there are 15 or more persons over 16 years of age who either do not read and write the English language, or who do not speak the English language." State aid is granted for the support of the schools provided for in the Arizona act. A Mississippi act of the same year authorizes any school district to levy a local tax for the purpose of maintaining evening or part-time schools for "persons in need of such instruction."

Reverting to the legislation of 1917, one finds that in that year at least a dozen States enacted laws affecting evening schools. Colorado authorized the establishment of public day and continuation schools, part-time schools, and evening classes for instruction in the arts and practices of trades and vocations, and empowered the State board of education to expend State funds therefor. Under the provisions of an Iowa act any school district may establish evening schools for persons over 16 years of age, and is required to establish such a school whenever 10 or more persons entitled to attend desire instruction therein in the common branches. Laws of California, Minnesota, and Tennessee provided, respectively, for both day and evening classes for persons over 14 years of age, for evening schools

for persons over 16, and for "night schools" for persons over 15. Nevada and North Dakota provided generally for evening schools. An act of New Mexico authorizes the directors of any school district in which there are 10 or more illiterate or semi-illiterate persons to employ the day-school teacher to give such persons instruction in the evenings. New Jersey now provides for the proportionate payment of State funds for evening schools for foreign-born residents when the aggregate to which such schools are entitled exceeds the State appropriation. The new law of South Carolina permits persons over 21 years of age to attend "public night schools." West Virginia authorizes the establishment of evening schools for persons over the compulsory-attendance age. Wisconsin increased to three-fourths mill the tax that may be levied in cities for industrial and continuation schools. From these laws at least one significant fact emerges: The older evening school conducted generally as an "opportunity school" for youth is now more extended in scope and function so as to include instruction for adults who are in need of further education and civic adjustment.

COMMUNITY ORGANIZATION IN SCHOOLHOUSES.

The propaganda for the "wider use of the school plant" is now more than a decade old, the social and recreation centers of Rochester, N. Y., having attracted wide attention as early as 1907, but the conception of this "wider use" has now grown broader. "The ultimate unit in every State, Territory, and possession of the United States is the school district. Every school district should therefore be a little democracy, and the schoolhouse should be the community capitol," says Dr. P. P. Claxton.¹ From this statement one gets the idea that every community is entitled to constitute itself a little democracy, centering in meetings at the schoolhouse, and conducting such legitimate neighborhood activities as it may deem proper, and without doubt this is the trend of present-day thought on the subject. In 1917, not fewer than 14 States made provision in one form or another for the use of the schoolhouse as a center of community activities other than the ordinary instruction given to pupils in the day schools.

Laws permitting local school authorities to open schoolhouses for recreational and other community purposes were enacted in 1917 in Iowa, Kansas, Michigan, Minnesota, Oklahoma, and Utah. In these laws the use of the schoolhouse for such purposes is left to the discretion of the school board; that is to say, the board is the final authority in determining whether the school plant shall be so used. Many of the friends of the community-center movement would have laws drawn in stronger form. They would have them require the

¹ U. S. Bureau of Education, Bulletin, 1918, No. 11, p. 5.

school board to open the schoolhouse for community activities when requested so to do by a sufficient number of citizens. Several laws enacted in 1917 were framed in accordance with this view. Thus, the Legislature of New Jersey changed from permissive to mandatory the law of that State. The district or city board of education there is now required, "subject to reasonable regulations to be adopted by said board or upon notification by the commissioner of education," to permit the use of the schoolhouse for community purposes. In New York, on petition of 25 citizens of any school district or city, the district board of trustees or city board of education is now required to organize and conduct community centers and civic forums and to provide funds for their support. Ohio likewise requires school boards to permit such use of school property.

An important feature of a well-organized community center is the provision for a "community secretary," or executive officer of the community organization. This office, which has already appeared in practice, is now appearing in laws on the subject. An example is found in chapter 86 of the New Hampshire Acts of 1917. This law authorizes cities and towns to equip and operate playgrounds and recreation centers and to employ "such play leaders, playground instructors, supervisors, recreation secretary, or superintendent and other officials as it deems best." The school board may be given charge of such activities, in which case schoolhouses may be used to carry out the purposes of the act.

The act of Congress making appropriations for the expenses of the government of the District of Columbia for the fiscal year ended June 30, 1918, provided "for the payment of necessary expenses connected with the organization and conducting of community forums and civic centers in school buildings, including * * * payment of janitor service, secretaries, teachers, and organizers, * * * \$5,000." This provision was continued in the appropriation act for the current year.

A North Carolina enactment of 1917 makes it the duty of the State superintendent of public instruction to provide a series of entertainments, varying in character and cost and consisting of motion pictures, to be given in rural schoolhouses. One-third of the cost of these entertainments is to be borne by the State, and the other two-thirds must be provided by the county board of education or the rural school community. An annual State appropriation of \$25,000 is made by this act. An act of the South Dakota Legislature authorizes school districts to levy taxes for community-center purposes, and a Texas act permits the use of school buildings for holding elections.

In 1918 Rhode Island, New Jersey, and Maryland made further provision for the community use of the school plant. The first two of these authorized the use of schoolhouses as polling places. Maryland

provided for community meetings and authorized the State superintendent to arrange for pictorial instruction in the schools.

TEXTBOOKS.

Textbook laws passed within the past two years present no especially distinctive features. Free textbooks and State uniformity have been subjects of legislation for a number of years, and the enactments of 1917 and 1918 followed the older lines. Montana, which prior to 1917 had a law permitting school districts to furnish books free of cost to public-school pupils, amended its law in that year so as to require that books be so furnished. Florida authorized the provision of free textbooks in two of its more important counties. With regard to uniformity of textbooks, one important law was enacted—Arkansas (act 112) changed its system from county uniformity to State uniformity.

A phase of textbook regulation which has received considerable attention in recent years is the requirement that any person, firm, or corporation offering books for sale or exchange in the State must file in the office of the State superintendent samples of such books and lists of prices at which they shall be sold. Thirteen States—Georgia, Illinois, Indiana, Iowa, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Ohio, Wisconsin, and Wyoming—now make such requirement, Illinois and Wisconsin having enacted laws to that end in 1917. In Georgia, Indiana, and Mississippi the requirement applies to books not subject to the uniform-textbook laws. States which do not belong either to this group of so-called “filing States” or in the list of those providing for State or county uniformity are Colorado, Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

LIBRARIES.

Some months ago a study of State laws relating to libraries was made in the Bureau of Education, and a summary of those in force January 1, 1918, was prepared. This summary disclosed the following facts respecting State provision of library facilities:

Number having State libraries.....	48
Number having State commissions for the promotion of libraries.....	84
Number having State traveling libraries.....	33
Number having State legislative reference bureaus.....	30
Number having State historical commissions (official).....	22
State aid to State historical societies.....	30
Number providing by law for county libraries.....	19
Number providing for county traveling libraries.....	13
Number providing for local public libraries.....	48
Number providing for public school libraries.....	43
State aid to public libraries.....	11
State aid to school libraries.....	19

Of the items enumerated in this table perhaps the most prominent in the library legislation of recent years are the provisions for legislative reference bureaus, county libraries, and school libraries. It will be observed that 30 States now make provision for legislative reference bureaus, whose essential function is to make comparative studies of legislation. This is a wholesome sign, for it shows a trend away from the older haphazard manner of enacting laws and toward the practice of framing new legislation in the light of the experience of other States.

In 1917 seven States—Indiana, Michigan, North Carolina, Pennsylvania, South Dakota, Texas, and West Virginia—authorized the establishment and maintenance of county public libraries. Whether this forecasts an extension of the county-library system to all parts of the country not already supplied with local community libraries can not now be determined, but it unquestionably shows a very strong present tendency to provide library facilities in this way. The county system would seem a thoroughly feasible system for rural sections of the country. A county library located at the county seat, having branches at other centers of population, and sending out traveling collections to every schoolhouse as a distributing station, can be made to serve every community in the county. School libraries, for which 43 States have made legal provision, have been widely extended in recent years, and rightly so, but the county library can be made to correlate and largely increase the reading facilities of the people.

HIGHER EDUCATION.

Perhaps the most important recent legislation affecting institutions of higher learning is that which regulates the finances or systems of support of State colleges and universities. In the matter of general maintenance and current expenses, there is a tendency both to increase the amounts allowed and to stabilize support by providing for tax levies to replace the older practice of making statutory appropriations. Increases in appropriations and tax levies as well were allowed within the last two years in several States. Colorado in 1917 provided for the State university a levy of eight one-hundredths of a mill in addition to the tax already authorized for that institution, and increased to the extent of three-tenths of a mill the tax for the construction and equipment of buildings for all of its institutions of higher learning. The Kansas Legislature of the same year proposed an amendment to the State constitution designed to authorize the legislature to fix a tax rate for the support of the State educational institutions. The Legislature of Washington fixed the levy for the university of that State at seventy-four one-hundredths of a mill. For

the biennium ending June 30, 1919, Illinois appropriates \$4,800,000 to its university, and the fund for the maintenance of the University of California is allowed to increase until the fiscal year 1920 at a rate sufficient to make for each year a sum equal to 107 per cent of the sum for the preceding year.

Provision of funds for buildings and kindred outlays for higher institutions was likewise prominent in the legislation of 1917. In some cases, these funds were provided by bond issues, and in others by tax levies. North Carolina and Tennessee chose the former means. In North Carolina an issue not to exceed \$3,000,000 in amount was authorized for the permanent enlargement and improvement of the State's educational and charitable institutions, and in Tennessee an issue of \$1,000,000 was allowed for the university. Wyoming provided, for the purpose of permanent buildings and improvements at its university, a State tax of one-eighth of a mill in addition to other taxes and appropriations.

The tendency to extend to a wider clientele the benefits of State institutions of higher learning is present in the legislative enactments considered here, as it has been in those of some former years. This extension usually takes the form either of scholarships or of provision of free tuition for the residents of the State. A New Hampshire act of 1917 appropriates \$15,000 annually to Dartmouth College, and directs that out of this amount 10 scholarships be provided for residents of the State. A Virginia act of 1918 provides 119 scholarships—one from each of the school divisions of the State—at the University of Virginia. These entitle their holders "to tuition in the college, room rent, light, heat, and attendance free of charge." Where there is more than one applicant in a school division, the beneficiary is to be selected by competitive examination. If the holder of a scholarship remains at the university two years or more, he must after leaving devote two school years to service as an administrative officer or teacher in the school system. A new Wisconsin law (1917) provides free tuition at the university for students whose parents have resided in the State one year or more; and a Montana act authorizes refunds of traveling expenses, less \$5, of students in the institutions of the university who are residents of the State.

The administration or control of State higher institutions was the subject of legislation in a few States in 1917 and 1918. Arizona created a commission of three members to devote their entire time to the general control of the State charitable, penal, and reformatory institutions and to the supervision of the finances of the university, normal schools, Pioneer Historical Society, State library, and legislative reference library. Nevada amended its law so as to reconstitute the board of regents of the university; this board now consists of five members, elected by vote of the people. North Carolina

increased from 81 to 101 the number of trustees of the university of that State.

In 1915 Massachusetts provided for a department of university extension under the control of the State board of education. The State appropriation for this purpose for the fiscal year 1918 was \$90,000. An act of the Legislature of Wisconsin passed in 1917 authorized the regents of the State university to establish and maintain a training school for public service.

The State of Washington in 1917 (ch. 10) sought to correlate as far as practicable the courses of instruction offered in its higher institutions and to eliminate unnecessary duplication of work. This act prescribes the "exclusive major lines" which the courses at the university shall embrace, and like provision is made with regard to the State agricultural college. Courses permitted in either or both institutions are likewise outlined in the act. Courses in the State normal schools are to be prescribed by the State board of education, but within the limits indicated in the law. A "joint board of higher curricula" composed of nine members is charged with the duty of "considering matters of efficiency and economy in the administration of the foregoing institutions."



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CONTENTS.—Proceedings of associations—Educational history and biography—Current educational conditions—Educational reconstruction—Educational theory and practice—Educational psychology: Child study—Educational tests and measurements—Special methods of instruction—Special subjects of curriculum—Kindergarten and primary school—Rural education—Secondary education—Teachers: Training and professional status—Higher education—School administration—School management—School architecture—School hygiene and sanitation—Physical training—Social aspects of education—Child welfare—Moral education—Religious education—Manual and vocational training—Vocational guidance—Agricultural education: Home economics—Commercial education—Professional education—Civic education—Americanization of immigrants—Military training—Education of war invalids—Education of soldiers—Education of women—Education of deaf—Exceptional children—Education extension—Libraries and reading—Bureau of Education: Recent publications.

NOTE.

The record comprises a general survey in bibliographic form of current educational literature, domestic and foreign, received during the monthly period preceding the date of its publication.

This office can not supply the publications listed in this bulletin, other than those expressly designated as publications of the Bureau of Education. Books, pamphlets, and periodicals here mentioned may ordinarily be obtained from their respective publishers, either directly or through a dealer, or, in the case of an association publication, from the secretary of the issuing organization. Many of them are available for consultation in various public and institutional libraries.

Publications intended for inclusion in this record should be sent to the Library of the Bureau of Education, Washington, D. C.

PROCEEDINGS OF ASSOCIATIONS.

190. National education association. Journal of proceedings of the fifty-sixth annual meeting. . . . Pittsburgh, Pa., June 29-July 6, 1918. Journal of the National education association, 3: 223-94, December 1918.

Department of Elementary Education.—Contains: 1. Mary D. Bradford: Training for social adjustment—the citizens of the future, p. 226-29. 2. N. C. Schaeffer: A better appreciation of cultural values, p. 229-30; Discussion: a better appreciation of ethical values [by] A. R. Brubacher, p. 230-33. 3. Caroline Hedger: The kindergarten as a factor in Americanization, p. 233-37. 4. Earl Barnes: Spoken English as a factor in Americanization, p. 237-39. 5. Van Ervie Kilpatrick: Americanization thru school gardens, p. 240-41.

Department of Secondary Education.—6. W. S. Small: Physical education in the high school in the present emergency, p. 246-48. 7. G. F. Thistlethwaite: Citizenship and athletics—a concrete example, p. 248-52. 8. G. D. Strayer: The emergency in secondary education, p. 252-53.

Department of Physical Education.—9. W. F. Bucks: The strength of a nation promoted thru physical education, p. 256-59. 10. S. H. Replogle: The influence of physical education on the development of the individual, p. 259-61. 11. May H. Prentice: Effects of physical education on school morale, p. 261-63. 12. L. L. Hill: Physical education in rural schools, p. 263-66. 13. R. D. Warden: Creed of physical education, p. 266-68. 14. J. G. Riggs: The policy of New York state with regard to physical training, p. 268-71.

Department of Rural and Agricultural Education.—15. G. A. Works: The relationship between teacher-training departments under the provisions of the Smith-Hughes act and state supervisors

- of agriculture for the state boards for vocational education, p. 275-78. 16. R. W. Stimson: Sectional conferences and periods of professional improvement work for teachers of high school agriculture, p. 281-84; Discussion, p. 284-86. 17. W. S. Wallis: Home-project work too small—something bigger needed—a substitute in operation, p. 286-88. 18. W. R. Hart: The new education in agriculture based on sound pedagogy, p. 290-94.
191. **Southern sociological congress. Democracy in earnest.** Washington, D. C., Southern sociological congress, 1918. 416 p. 8°.
- Chapter VI, The child, the woman, and the future nation.
- Contains: 1. M. L. Kessler: The modern orphanage in the South, p. 245-51. 2. E. Godbold: The school as a focus of disease, p. 251-56. 3. Mrs. Helena Holley: Responsibility for health in public schools, p. 257-62. 4. J. P. Faulkner: Teaching health in the public schools, p. 262-69. 5. R. W. Hogue: The child and heredity, p. 269-78.

EDUCATIONAL HISTORY AND BIOGRAPHY.

192. **Bloss, W. Escott.** An up-to-date schoolmaster in an old-time school. *School guardian* (London) 44: 54-56, January 1919.
- A sympathetic and interesting sketch of Charles Hoole, a seventeenth century schoolmaster, who conducted a grammar school in London. Describes his methods of discipline, etc.
193. **Garraghan, Gilbert J.** St. Regis seminary. *Catholic historical review*, 4: 452-78, January 1919.
- A history of the first Catholic Indian school in the United States. *St. Regis seminary, 1832-1831.*
194. **Gragg, Florence A.** Two schoolmasters of the renaissance. *Classical journal*, 14: 211-23, January 1919.
- Describes the work of Mathurin Cordier and Juan Luis Vives.
195. **Kimmel, Herbert.** The status of mathematics and mathematical instruction during the colonial period. *School and society*, 9: 195-202, February 15, 1919.

CURRENT EDUCATIONAL CONDITIONS.

GENERAL AND UNITED STATES.

196. **Barrett, James W.** The twin ideals; an educated commonwealth. London, H. K. Lewis & co. ltd., 1918. 2 v. 8°.
- A republication of essays, memoranda, articles, and letters on various educational, social, and political topics. Author has been a member of council of management and lecturer in the University of Melbourne, Australia.
197. **Cooley, C. H.** A primary culture for democracy. *Michigan alumnus*, 25: 293-99, February 1919.
- The demand for a new sort of liberal education.
198. **Denny, W. A.** A report on the school system of Anderson, Indiana, 1917-18. [Anderson, Ind., Senior high school printery, 1919?] 138 p. illus. 8°.
- This report is in the nature of a survey, giving information about school finance, the teaching staff, the pupil, school buildings, etc.
199. **General education board.** Public education in Delaware; a report to the Public school commission of Delaware. New York, General education board, 1918. 109 p. plates, tables. 12°.
- This report of the survey was prepared by Drs. Abraham Flexner and Frank P. Beachman, of the General education board.
200. **Hanson, C. C.** The business man's criticism of our public school system. [Memphis, Tenn., 1919] 14 p. 8°.
- A paper read before the National conference on rural education and country life, called by the United States Commissioner of Education, at Daytona, Florida, February 1-4, 1919.
201. **James, George F.** The schools of the people. *Educational foundations*, 30: 202-12, February 1919.
- This article is also issued in pamphlet form by the Western department of the National war work council, Y. M. C. A., San Francisco, Cal.
- Contents.—Foreword—War and schools.—I. Education spells opportunity.—II. The schools of yesterday.—III. The schools of today.—IV. The schools of tomorrow.
202. **Mac Caughey, Vaughan.** The racial elements in Hawaii's schools. *Education*, 39: 280-91, January 1919.
- Emphasizes the diversity of the racial elements, and the dominance of Asiatics in the schools of Hawaii.

203. **Mac Caughey, Vaughan.** Some outstanding educational problems of Hawaii. School and society, 9: 99-105, January 25, 1919.
 "The present paper aims to survey briefly some of Hawaii's outstanding educational problems, in terms of the modern movements towards genuine Americanization and genuine democracy."
204. **Moore, Robert C.** A letter to His Excellency, the Governor of Illinois, and to the members of the fifty-first General assembly. Illinois teacher, 7: 75-81, February 1919.
 The secretary of the Illinois state teachers' association presents a constructive program for consideration, including recommendations for increasing funds and increasing the teachers' wages. Compares the wages of mine workers with those of teachers.
205. **Morrison, Henry C.** Draft of a plan for needed improvements in our school system. [Hartford, Conn.] 1919. 32 p. 8°.
 A study of proposed organization of the school system of Connecticut by the assistant secretary of education.
206. **Reid, Gilbert.** Philippine observations. Journal of race development, 9: 283-97, January 1919.
 Discusses the educational system of the Philippine Islands.
207. **Smith, Robert M.** Some economic aspects of education. [Malone, N. Y., Industrial press, 1918?] 16 p. 8°.
208. **Sowers, J. I.** Making education universal. Teacher's journal, 18: 304-9, February 1919.
 The educational value of labor, equality of educational opportunity, and education and social betterment.
209. **Weatherly, Ulysses G.** Educational publicity. Scientific monthly, 8: 146-59, February 1919.
 Says that educational publicity must differ from commercial advertising because the central purpose of education is impartive and not acquisitive. Has reference to colleges and universities.

FOREIGN COUNTRIES.

210. **Begbie, Harold.** Living water, being chapters from the romance of the poor student. London, Headley bros. [1918?] 209 [1] p. 12°.
211. **Bezard, J.** Une discussion anglaise sur les "humanités." Revue universitaire, 27: 332-44, December 1918.
 Reviews the opposing arguments in these papers: Education in our public schools; a critical defence of the present system, by Cyril E. Robinson, Nineteenth century and after, June 1917. A defence of the modern humanities, by Cloudesley Brereton, in same periodical for April 1918.
212. **Browning, Webster E.** The program of studies for the evangelical school in Latin America. Educational foundations, 30: 218-23, February 1919.
213. **Chamberlain, W. I.** Recent developments in the state educational system of India. Journal of race development, 9: 298-313, January 1919.
214. **Gros, J.** L'inspection primaire en France. Deuxième partie: de 1850 à 1915. Revue pédagogique, 73: 258-65, October 1918.
 To be continued.
 The first part of this series, covering the period 1835 to 1850, appeared in the Revue pédagogique for August and September 1912.
215. **Intercollegiate Zionist association of America.** Kadimah. New York, Federation of American Zionists, 1918. 220 p. plates. 12°.
 Contains: 1. Educational institutions of Palestine, by Moshe Mnuchin, p. 75-132. 2. The Intercollegiate: a retrospect, by Jonas S. Friedenwald, p. 193-203.
216. **Mossinsohn, Ben Zion.** Israel's cultural renaissance. Asia; journal of the American Asiatic association, 19: 120-26, February 1919. illus.
 An account of the recent revival of Jewish educational institutions in Palestine.
217. **Raphael, Gaston.** Les langues dans l'Europe moderne. Revue pédagogique, 73 : 344-63, November 1918.
 A review of a recent book on the above subject by A. Meillet (Paris, Payot et cie.) which holds that unity of civilisation tends to require unity of language. The society of nations will need to use the principal existing civilized tongues, and doubtless also an international language.

218. Rhodes, E. N. School management in Germany. Educational administration and supervision, 4: 510-23, December 1918.
219. Saraz, Alfredo. Il problema della scuola nell'ora presente. Nuova antologia, 53: 384-91, August 16, 1918.
220. Schoen, Max. H. G. Wells on education. Education, 39: 325-34, February 1919.
A review of Mr. Well's "The education of Joan and Peter."
221. Wallace, W. S. The text-book poison in Canadian-American friendship. Bookman, 48: 680-84, February 1919.

EDUCATIONAL RECONSTRUCTION.

222. Clark, M. G. Idealism and our new nationalism. Midland schools, 33: 150-56, 158-61, January 1919.
Also separately reprinted.
President's address before the Iowa state teachers' association.
Reconstruction—industrial, military, educational, and religious.
223. Colorado. Department of public instruction. A war-modified course of study for the public schools of Colorado. Vols. 1-5. Denver, 1918. 5v. 8°.
Prepared by Mary C. C. Bradford, and co-operating educators.
Vol. I, Social subjects, 187 p. Vol. II, The tools of education, 77 p. Vol. III, The world of nature and of man, 179 p. Vol. IV, Special subjects, 96 p. Vol. V, Outline courses for high schools, junior and senior high school courses, four year high school outline, miscellaneous, 74 p.
224. Davis, Calvin O. The war and secondary education. Michigan alumnus, 25: 311-21, February 1919.
Considers briefly transformations that are being made in respect to aims, organization, subject-matter, internal administration, government, and methods in secondary education.
225. Ellwood, Charles A. Reconstruction of education upon a social basis. Educational review, 57: 91-109, February 1919.
Says that we live in a social world more than in a world of physical objects. Our chief adjustments must be made to men and to institutions, not to things. Education is the medium for such adjustments. Recommends more social and political studies in the curriculum of schools and higher institutions.
226. Fisher, Samuel H. The need and direction of Yale reconstruction. Yale alumni weekly, 28: 527-29, February 14, 1919.
A speech at the dinner of the New Haven Yale alumni association, February 3, 1919.
227. Hall-Quest, A. L. Curriculum of modern high school. School index, 5: 154-55, 162-64, January 31, February 7, 1919.
Paper read before the Cincinnati schoolmasters club on January 11, 1919.
Discusses the views of Dr. Eliot and Dr. Butler on educational reconstruction.
228. Lose, Charles. Necessary changes in the course of study because of the war. In Board of principals of the state normal schools of Pennsylvania. Proceedings, 1918. Harrisburg, Pa., 1918. p. 4-11.
Necessary changes in the course of study of normal schools.
229. National Catholic war council. Committee on special war activities. Social reconstruction. A general review of the problems and survey of remedies. Washington, D. C., Committee on special war activities, National Catholic war council, 1919. 24 p. 12°. (Reconstruction pamphlets, no. 1, January 1919.)
The committee is of the opinion that, in the reconstruction that is to come, vocational training should be substantially universal, but not divorced from cultural education. It regards the outlook as good for legislation against child labor.
230. Poland, William. Reconstruction; the college. America, 20: 401, January 25, 1919.
The struggle of the college, its place between the high school and the post-graduate school. In conclusion the writer says that at present the character of the knowledge implied by the A. B. degree is relatively indeterminate, while the time required to obtain the degree is 16 years. Wonders if it would be possible to determine the knowledge and if the knowledge as so determined could be acquired in 12 years.

231. **Strayer, George D.** Educational leadership. *Journal of the New York state teachers' association*, 5: 290-94, January 1919.

Speaks particularly of lessons that have been learned from the war and the new bill for a Department of education.

232. **Zabriskie, Edward Cornell.** Effect of the war on the schools. *School*, 30: 233, February 13, 1919.

The writer sees a great spiritual and mental uplift for the schools and a broadened field for teachers.

EDUCATIONAL THEORY AND PRACTICE.

233. **Adams, John, ed.** The new teaching. 2d. ed. London, New York [etc.] Hodder and Stoughton, 1919. 428 p. 8°.

CONTENTS.—I. The new teaching, by The editor.—II. English, by The editor.—III. Modern foreign languages, by L. de Glehn.—IV. The classics, by W. H. D. Rouse.—V. Science, by T. P. Nunn.—VI. Mathematics, by J. Strachan.—VII. Geography, by J. Fairgrieve.—VIII. History (a) by M. W. Keatinge; (b) by E. L. Hasluck.—IX. (a) Music, by P. C. Buck; (b) Music in elementary schools, by J. Borland.—X. Drawing and art, by H. B. Carpenter.—XI. Handwork, by G. F. Johnson.—XII. Physical training, by G. M. Campbell [and] Miss Muriel H. Spalding.—XIII. Domestic subjects by Miss M. E. Marsden.—XIV. Commercial subjects, by F. Charles.

234. **Finegan, Thomas E.** Training for national service. *Journal of education*, 89: 59-62, January 16, 1919.

An address before the Massachusetts state teachers' association.

Says that the best training for national service lies in the best training of the individual human unit. It is the business of the school to begin with the individual.

235. **Peterson, Joseph.** Getting results in teaching. *School and home*, 11: 8-9, January 1919.

Thinks that the two fundamental factors in good teaching are proper motivation and careful and accurate checking up of the results of individual efforts as soon as possible after their occurrence.

236. **Busk, Robert R.** The doctrines of the great educators. London, Macmillan and co., limited, 1918. 294 p. 12°

CONTENTS.—I. Plato.—II. Quintilian.—III. Elyot.—IV. Loyola.—V. Comenius.—VI. Milton.—VII. Locke.—VIII. Rousseau.—IX. Pestalozzi.—X. Herbart.—XI. Froebel.—XII. Montessori.

EDUCATIONAL PSYCHOLOGY; CHILD STUDY.

237. **Bovingdon, John.** Ignorance and experiment in education. *Education*, 39: 257-69, January 1919.

Advocates the experimental method in education. Says that our knowledge of child psychology, educational methods and the requirements of social life is inadequate.

238. **Conklin, Edmund S.** Superstitious belief and practice among college students. *American journal of psychology*, 30: 83-102, January 1919.

A report of a study based upon the returns to a questionnaire presented each year for four years (1913-1917) to the students beginning psychology at the University of Oregon. Superstitious belief or practice was admitted by 53 per cent of the group studied, by 40 per cent of the males and 66 per cent of the females. Interesting details are presented in the paper.

239. **Dodson, John D.** An experimental study of the relative values of reward and punishment in habit formation. [n. p.] 1918. p. 231-276. 4°.

A dissertation submitted to the faculty of the graduate school of science, literature and arts of the University of Minnesota in partial fulfillment of the requirements for the degree of Doctor of philosophy.

Reprinted from *Psychobiology*, vol. I, no. 3, November 1917.

240. **Hall, G. Stanley.** The viewpoint of the psychologist as to courses of study which will meet the future demands of a democracy. *Journal of the New York state teachers' association*, 5: 294-98, January 1919.

241. **Hug-Helmuth, H. von.** A study of the mental life of the child. *Psychoanalytic review*, 6: 65-88, January 1919.

Continued from Vol. 5, p. 427, of December number. Discusses art in the life of the child; dreams, etc.

242. **Kirkpatrick, E. A., ed.** Studies in psychology, by student teachers for teachers in training and service. Boston, R. G. Badger [1918] 194 p. 12°.

243. **Wilson, Clara Owaley.** The educational value of toys and pets. Kindergarten and first grade, 4: 44-48, February 1919.

To be continued.

A thesis submitted to the Department of education of the graduate college of the University of Nebraska.

Results of a questionnaire sent to the parents of 750 kindergarten children, and from returns received from 670 adults, giving reminiscences of childhood toys and pets.

EDUCATIONAL TESTS AND MEASUREMENTS.

244. **Cody, Sherwin.** Commercial tests and how to use them. Yonkers-on-Hudson, N. Y., World book company, 1919. 216 p. 12°. (School efficiency monographs)

This book presents the history and technic of the National business ability tests, which were used as the basis for the efficiency employment register of high school graduates now being offered by the United States employment service in New York city. Commercial employment here includes office boys, general clerks, and sales people, as well as stenographers and bookkeepers.

245. **Greene, Harry A.** A standardization of certain opposites tests. Journal of educational psychology, 9: 559-66, December 1918.

"The opposites test has been shown to have a high correlation with general intelligence and to be a high diagnostic instrument. Lists of opposites vary in difficulty, and in this study an attempt has been made to determine the relative difficulty of each term of the test. Each of the 80 stimulus words is given a point rating on the basis of nearly 1,000 responses."

246. **Henry, Mary Beas.** Mental testing as an aid in guidance and classification of school children. [Santa Ana, Cal.] 1919. 23 p. 8°. (Publications of Santa Ana public schools, Santa Ana, Cal. Department of research. Bulletin no. 1)

247. **Herring, John P.** Measurements of some abilities in scientific thinking. Journal of educational psychology, 9: 535-58, December 1918.

"Formal logic has fallen into disrepute, but the need for the study of logical processes is greater than ever. The author presents a series of tests in scientific method, and discusses their use in individual and class diagnosis."

248. **Johnson, Willis E.** Reading, writing, arithmetic, and spelling in the city and town schools of South Dakota in 1917-18. Aberdeen, S. Dak., Bureau of educational research, Northern normal and industrial school [1918] 30 p. 8°. (Bulletin of the Northern normal and industrial school, vol. 12, no. 2, October 1918)

249. **Los Angeles, Cal. School department.** Division of educational research. First yearbook. Section 1. Los Angeles city school district, 1918. 182 p. 8°. (School document no. 13)

Gives the results of tests given in arithmetic, reading, history, spelling, geography, and English.

250. **Minnick, J. H.** A scale for measuring pupils' ability to demonstrate geometrical theorems. School review, 27: 101-9, February 1919.

Study based on tests given in 30 high schools throughout the country and ranging in size from a few hundred pupils to several thousand. These pupils had completed either the first two books of plane geometry or all of plane geometry. Illustrated with graphs and tables.

251. **Morley, E. E.** Scientific measurement of special abilities and its relation to class-room instruction. Educator-journal, 19: 305-15, February 1919.

A study made of the achievements of grade pupils in ten consolidated schools of Hendricks county, Indiana.

252. **Pressey, Luella W.** Sex differences shown by 2,544 school children on a group scale of intelligence, with special reference to variability. Journal of applied psychology, 2: 323-40, December 1918.

Study based on a mental survey of the school population of three small Indiana cities, made in the spring of 1918, using a group scale of intelligence developed at Indiana university.

253. **Skeeles, Arthur G.** The educational yard stick. Journal of education, 89: 93-95, January 23, 1919.

The value of tests.

254. **Starch, Daniel.** A scale for measuring handwriting. *School and society*, 9: 154-58, 184-88, February 1, 8, 1919.
 "The purpose of this investigation was to make a thorough examination of the values and units of the existing handwriting scales, in particular those of Thorndike and of Ayres, and to construct a new one as it seemed advisable.
255. **Thorndike, Edward L.** Tests of intelligence; reliability, significance, susceptibility to special training, and adaptation to the general nature of the task. *School and society*, 9: 189-95, February 15, 1919.
256. **Wilson, G. M.** The proper content of a standard test. *Elementary school journal*, 19: 375-81, January 1919.
 Describes the Monroe decimal tests.

SPECIAL METHODS OF INSTRUCTION.

257. **Clement, Ina.** Teaching citizenship via the movies. New York city, 1918. 19 p. 8°. (Municipal reference library. Special report no. 2, June 26, 1918)
 Contains a list of civic motion picture films which are available for use by civic institutions or municipalities.
258. **Pierce, Beattie L.** An experiment in individual instruction in history. *Historical outlook*, 10: 86-87, February 1919.
 The advantages of the individual method of instruction as shown by an experiment tried in the University high school of Iowa City.
259. **Thompson, O. J.** A study of the socialized versus the academic method of teaching written composition. *School review*, 27: 110-33, February 1919.
 Study based on results of an experiment conducted by two freshman classes in a large technical high school. Says that method is a decisive factor in teaching written composition. Attention of pupils should be focussed primarily on the social elements of the composition problem. Illustrated with graphs and statistical tables.

SPECIAL SUBJECTS OF CURRICULUM.

260. **Barker, W. H. and others.** Geography in advanced courses. *Geographical teacher* (London) 9: 181-89, (Spring) 1918.
 A symposium. Papers read at the 1918 annual meeting of the Geographical association (England).
261. **Benns, F. Lee.** A student peace conference. *Outlook*, 121: 260-62, February 12, 1919.
 Historical work in the department of history of the Danbury high school, Conn. Students took the Paris peace conference as a study.
262. **Bidwell, Alice.** An English service system. *English journal*, 8: 35-38, January 1919.
 Method in vogue in the Freeport high school, Freeport, Ill. Each English teacher keeps a file of the reports of her students, and at the end of the semester certain results are made known. Gives blank forms for recording data.
263. **Carmichael, R. D.** Motives for the cultivation of mathematics. *Scientific monthly*, 8: 160-78, February 1919.
 Emphasizes the study of mathematics because it has shown itself a valuable tool in the interpretation of phenomena.
264. **Cates, E. E.** What to teach in English literature. *Education*, 39: 339-47, February 1919.
 Emphasizes the importance of developing a taste for good literature—the English classics.
265. **Dakin, Franklin A.** Practical Latin. *Classical weekly*, 12: 114-17, February 10, 1919.
 Discusses among other things the great waste involved in monotonous memory-tasks.
266. **Dobie, J. Frank.** "Words, words, words, my lord." *English journal*, 8: 8-15, January 1919.
 Study of new words and their definitions.
267. **Englar, Margaret T.** Second year Latin and some aspects of the world war. *Classical weekly*, 12: 99-102, January 27, 1919.
 Comparisons between Caesar's campaigns in Gaul and the war in France. Habits of ancient Gauls described.

268. **Gaston, Charles R.** Social procedure in the English classroom. *English journal*, 8: 1-7, January 1919.
Relating the English work of the classroom to the community life: the conduct of the recitation is left largely to the students themselves, with the teacher as guide.
269. **Goode, J. Paul.** A course in economic geography for the high school. *Educational review*, 57: 110-19, February 1919.
Recommends at least three unit courses in geography: (1) The principles of geography; (2) Economic geography; and (3) Commercial countries. Outlines a course in economic geography.
270. **Gray, William S.** Reading in the elementary schools of Indianapolis. *Elementary school journal*, 19: 336-53, January 1919.
Illustrated with graphs and tables. Says among other things that there is a strong tendency in the lower grades toward a decrease in the percentage of time devoted to oral-reading instruction and an increase in the percentage of time devoted to silent-reading instruction.
271. **Hedges, M. H.** Group collaboration: an experiment in play writing at Beloit. *English journal*, 8: 39-41, January 1919.
272. **Hodgdon, Daniel Russell.** The psychological and pedagogical basis of general science. *General science quarterly*, 3: 65-81, January 1919. illus.
Address presented at the Chicago meeting of the Central association of science and mathematics teachers, November 1918.
273. **Moore, Frank G.** Post bellum Latin. *Educational review*, 57: 129-40, February 1919.
Recommends certain Latin authors as throwing light on the civilization of Roman Britain, Gaul, and Germany.
274. **Osborn, Herbert.** Zoological aims and opportunities. *Science*, n. s. 49: 101-12, January 31, 1919.
Deals also with the educational aspects of the question; extension activities, etc.
Address of the retiring vice-president and chairman, Section F, Zoology, of the American association for the advancement of science, December 27, 1918.
275. **Pope, Ella H.** Linguistics as a required subject in college and in high school. *English journal*, 8: 28-34, January 1919.
Gives a plan for linguistics in the high school, with bibliography. Emphasizes the value of the study.
276. **Rawlins, Cora M.** Everyday problems in spoken English. *Illinois association of teachers of English bulletin*, 11: 6-12, January 1, 1919.
277. **Smith, Mary Loomis.** The value of Latin to learners of English. *North Carolina education*, 13: 5-7, February 1919.
278. **Teaching**, vol. 4, no. 4, December 1918. (Science: biological and physical)
Contains: 1. L. C. Wooster: The biological and environmental sciences, p. 7-11. 2. Florence G. Billig: Nature study and elementary science, p. 11-14. 3. F. U. G. Agrellius: Botany, plant nature study and bacteriology in the Kansas state normal school, p. 14-17.4. F. W. White: Physiology and hygiene: Why they should be taught, with some suggestions on method and sequence, p. 17-22. 5. M. L. Smith: Physical science in the first six grades: a suggestive curriculum, p. 22-29.
279. **Ullman, B. L.** The Latin of the future. *Classical journal*, 14: 308-19, February 1919.
Says that Latin "undoubtedly belongs in the junior high school. But there are problems presented by seventh-grade Latin which must be solved by the experience of the future."
280. **Webb, H. A.** Physics and chemistry. Issued by the State department of education, Nashville, Tennessee. [Nashville] Tennessee industrial school print [1918] cover-title, 19 p. 8.
281. **West, Andrew F.** The humanities after the war. *Educational review*, 57: 141-52, February 1919.
Advocates classical instruction. Criticises the over emphasis on scientific studies. Humanistic studies make for humane behavior.
282. **Worun, Adrian A.** General science in Michigan. *School science and mathematics*, 19: 136-49, February 1919.
The status of general science teaching in Michigan and its recognition as a unit for college credit.

KINDERGARTEN AND PRIMARY SCHOOL.

283. **Culverwell, E. P.** The Montessori principles and practice, a book for parents and teachers. 3d. ed. rev., with additions. London, G. Bell & sons, Ltd, 1918. xxix, 334, 5p. incl. front. (port.) illus. 12°.

284. **Hailmann, William N.** Phases of the kindergarten primary movement in the United States. Kindergarten and first grade, 4: 49-52, February 1919.
The reconstruction of the primary school on the basis of the Froebelian principles.
285. **Wolff, Maurice.** La maison des enfants et la méthode d'éducation de Mme. Montessori. Revue pédagogique, 73: 315-30, November 1918.
Describes and in general commends the Montessori system. Comments on its success in America.

RURAL EDUCATION.

286. **Bradley, Frances Sage and Williamson, Margaretta A.** Rural children in selected counties of North Carolina. Washington, Government Printing Office, 1918. 118 p. plates. 8° (U. S. Children's bureau. Rural child welfare series no. 2. Bureau publication no. 33)
287. **National rural life association.** Report of the sub-committee on rural schools. Nebraska teacher, 21: 260-61, February 1919.
Report made at the conference of the National rural life association held in Baltimore, January 12, 1919.
I. Introductory statement—the rural school situation.—II. Needs and objectives for rural school improvements.—III. Immediate problems.
288. **Von Tungen, George H.** A rural social survey of Orange township, Blackhawk county, Iowa. Ames, Iowa, 1918. p. 396-450. illus. 8°. (Iowa state college of agriculture and mechanic arts. Agricultural experiment station. Bulletin no. 184, December 1918.)
The author was assisted in the field work by W. A. Brindley and H. B. Hawthorn.

SECONDARY EDUCATION.

289. **Jacoby, Asher J.** Elmira's high school extension courses. Educational administration and supervision, 4: 536-46, December 1918.
School credit for work done outside of school hours in music and Bible study.
290. **North, Francis R.** The relation of the public high school to the system of which it is a part. School review, 27: 81-89, February 1919.
Says that the high school should be in method as well as in form an integral part of the system which comprehends the administration of the grades. What has been accomplished in the Paterson (N. J.) high school in the way of civic outlook and cooperation.
291. **Patrick, Wellington.** The county high school. Kentucky high school quarterly, 5: 1-11, January 1919.
Also separately reprinted.
A thesis submitted to the faculty of Teacher's college of the George Washington university, Washington, D. C., as part satisfaction for the requirements of the degree of Master of arts.
Analyzes the various state laws on county high schools.
292. **Quick, C. J.** Suggestions for arranging and keeping up with apparatus and materials in the laboratory. School science and mathematics, 19: 213-30, February 1919.
Suggestions for a high school science laboratory.
293. **Rapeer, Louis W.** Minimal essentials in the high school. High school journal, 2: 39-42, February 1919.
To be continued next month.
From Dr. Rapeer's forthcoming book, The consolidated rural school.
This number deals principally with entrance requirements.
294. **Snedden, David.** Proposed revision of secondary-school subjects looking to more effective education in personal culture and good citizenship. School and society, 9: 159-64, February 8, 1919.
Read before the High school department of the Pennsylvania teachers' association, December 30, 1918.
295. **Steeper, H. T.** The extra-curriculum activities of the high school. Education, 39: 367-73, February 1919.
Work in the high school, Leavenworth, Kansas. Describes the organization and supervision of the student's social life.
296. **Williams, L. A.** The high school recitation. High school journal, 2: 35-38, February 1919.
To be continued.
The functions of the recitation and characteristics of a good recitation.

TEACHERS; TRAINING AND PROFESSIONAL STATUS.

297. **Barnard, Florence.** A teacher's assets and liabilities. *Journal of education*, 89:87-89, January 23, 1919.
The teacher's salary and how she should manage it.
298. **Bergmann, Henri.** La préparation à Paris des étrangers futurs professeurs de français à l'étranger. *Revue universitaire*, 27:348-55, December 1918.
Proposes the establishment at Paris of a sort of seminary or normal school for the purpose of training foreigners to teach French, and for leading them to know and understand French life.
299. **Cleveland, Ohio.** Board of education. Cleveland public schools. Salary schedules. Qualifications and conditions of employment of teachers, principals, supervisors, and assistant superintendents. Cleveland, Ohio, Board of education, 1918. 11 p. 8°.
300. **Heckert, J. W.** Curricula for the training of teachers for the elementary schools. *Ohio educational monthly*, 68:40-44, February 1919.
Suggestions for the reorganization of curricula for the Ohio normal colleges.
301. **Knox, Margaret and Phillips, Ellen M.** The estimate of a teacher's work by her supervisory officers. *Ungraded*, 4: 18-20, 40-43, 68-70, October, November, December 1918.
302. **Lovejoy, Arthur O. and Stone, Harlan F.** The American association of university professors. Supplementary statement concerning the plan of compulsory and contributory annuities proposed by Carnegie foundation. *School and society*, 9:150-54, February 1, 1919.
303. **Miller, George F.** Rating a teaching position. *American school board journal*, 58:35-36, February 1919.
Written from the teacher's point of view. Enumerates some of the factors which make schools attractive, or the opposite to teachers.
304. **New Jersey.** Bureau of state research. Reorganization of the New Jersey teachers' pension and retirement systems. Report of the Pension and retirement fund commission of the state of New Jersey. Newark, Bureau of state research, 1918. 27 p. 8°. (State research (New Jersey) section 2, vol. VI, no. 2, November 1918. Consecutive no. 13)
305. **Patterson, Robert A.** The confessions of an instructor. *Yale alumni weekly*, 28:485-86, January 31, 1919.
Says that one of the fundamental questions of reconstruction at Yale is to make her instructors better teachers. A plea for a more definite and uniform policy so that each instructor may be encouraged to devote a greater share of his time and attention to the problems of teaching.
306. **Payne, E. George.** Educational sociology in city training schools. *School and society*, 9:212-16, February 15, 1919.
Report of the committee on educational sociology in city training schools to the City training schools section of the Department of superintendence of the National education association.
307. **Smith, K. G.** The development of teacher training in trade and industry under the Smith-Hughes act. *Manual training magazine*, 20:193-97, February 1919.
308. **Tuckwell, Gertrude M.** Equal pay for equal work. *Fortnightly review*, 105:63-76, January 1919.
Discusses the compensation of women as compared with men in England in a number of occupations, including teaching.
309. **Williams, Joseph T.** Teacher training in colleges. *School and society*, 9:105-109, January 25, 1919.
What the state departments require.
310. **Works, George H.** Essential elements in agricultural teacher training. *Vocational summary*, 1:17-18, January 1919.
An address to the federal agents at the Agricultural conference, North Atlantic region, held in New York, December 12, 1918.
311. **Young, Walter H.** The personality of the teacher. *Education*, 39:374-80, February 1919.
Discusses school discipline, personality, etc.

HIGHER EDUCATION.

312. Audollent, Auguste. Le réveil des universités françaises. *Revue internationale de l'enseignement*, 38: 443-52, November-December 1918.
313. Baldensperger, Fernand. French universities and the war. *Columbia university quarterly*, 21: 51-63, January 1919.
314. Colebank, G. H. Rational college entrance requirements. *Journal of education*, 89: 149-50, February 6, 1919.
Says in conclusion that colleges and universities have been emphasizing too much non-essential subjects, such as foreign languages and mathematics.
315. Croiset, Alfred. La faculté des lettres de l'Université de Paris. *Revue internationale de l'enseignement*, 38: 429-42, November-December 1918.
Reprint of a chapter from the book *La vie universitaire à Paris*, published in 1918 by A. Colin, Paris.
316. From public school to college. *Harvard alumni bulletin*, 21: 339-44, January 30, 1919.
Three letters on college entrance requirements, one from Superintendent Frank V. Thompson, criticizing the entrance requirements of eastern colleges, another from President Lowell of Harvard university, and a third from Stephen H. Knight, who also criticizes Harvard entrance requirements.
Superintendent Thompson's letter also appears in *Educational standards*, for February 1919, under the title "Educational democracy as college entrance requirements."
317. Harvard university. President Lowell's report for 1917-18. Boston, Mass., 1919. 26 p. 8°. (Supplement to the *Harvard alumni bulletin*, vol. 21, no. 18, January 30, 1919)
Deals particularly with the war work of Harvard university, the S. A. T. C., and the question of conferring the A. B. degree on students who left college before completing the course in order to enter the Army or Navy.
318. Jastrow, Joseph. The academic unrest. *Nation*, 108: 158-60, February 1, 1919.
Says that it is only by divesting themselves of authority that trustees and presidents and deans can serve the cause of learning. It is they who must be convinced that the universities may be made safe for democracy.
319. Boe, Frederick W. The college: yesterday and to-morrow. *Scribner's magazine*, 65: 181-91, February 1919.
320. Thieme, Hugo P. Higher institutions of learning in Paris. *Michigan alumnus*, 25: 300-10, February 1919.
321. Van Horne, John. Reading material used in college during the past five years in first and second year French classes. *Modern language journal*, 3: 143-57, January 1919.
322. Walcott, Gregory D. The present status of Greek and Latin as requirements for the A. B. degree in American colleges and universities. *School and society*, 9: 119-28, January 25, 1919.

SCHOOL ADMINISTRATION.

323. Blair, F. G. [Federal control of education]. *Educational press bulletin*, no. 135, p. 1-2, February 1919.
324. Cary, C. P. Prussianizing American education. *Western teacher*, 27: 209-12, February 1919.
Says the dual system of education is un-American, inefficient in the larger sense, and adapted only to a Prussian or other caste system.
325. Kendall, Calvin H. Some factors that make good school officials. *American school board journal*, 58: 29-31, February 1919.
An abstract of an address before the Pennsylvania school directors' association, Harrisburg, Pa., February 9, 1918.
326. Sowers, J. I. Effective supervision of schools and the special supervisor. *American school board journal*, 58: 28-29, February 1919.

327. **U. S. Congress. Senate. Committee on education and labor.** Hearing before the Committee on education and labor United States Senate, Sixty-fifth Congress, third session, on S. 4987; a bill to create a department of education, to appropriate money for the conduct of said department, to appropriate money for federal cooperation with the states in the encouragement and support of education, and for other purposes. December 5, 1918. Washington, Government printing office, 1919. 144 p. 8°
328. **Young, Walter H.** Functions of the state superintendent of public instruction. American schoolmaster, 12: 12-17, January 1919.

SCHOOL MANAGEMENT.

329. **Burr, A. W.** Directed study. School review, 27: 90-100, February 1919.
 Recommends the use of the regular class period sometimes for recitation and sometimes for study, the class studying an assigned advance lesson and the teacher in personal conference "studying how the pupil studies."
330. **Hall-Quest, Alfred L.** Supervised study—the new administrative vision. American school board journal, 58: 25-27, February 1919.
331. **Handschin, Charles H.** Individual differences and supervised study. Modern language journal, 3: 158-73, January 1919.
 This paper is an abridgement of Chapter XIII of "Methods of teaching modern languages," to be published by the World book company.
 Adapting work in modern language teaching to individual differences.
332. **Hughes, Harold F.** Limited departmentalization: grades III-VI. Elementary school journal, 19: 361-66, January 1919.
 An experiment tried in the Webster school, Fresno, California. The departmental work includes music, drawing, primary manual training, play, language, sewing, penmanship, and geography.

SCHOOL ARCHITECTURE.

333. Code of lighting school buildings. General science quarterly, 3: 91-106, January 1919. illus.
 By the following committee on school lighting: M. Luckieah, chairman; R. B. Ely, L. O. Grondahl, J. D. Lee, jr., F. Park Lewis, H. H. Madgick, F. K. Richtmyer.
334. **Cummins, Robert A.** Small items of great significance in the building and equipping of schools. American school board journal, 58: 37-38, February 1919.
 Discusses, first, items pertaining to rural schools; second, items of importance to all schools, and, third, items pertaining to consolidated rural and city schools.

SCHOOL HYGIENE AND SANITATION.

335. **Averill, Lawrence Augustus.** A health examination at school entrance. American journal of school hygiene, 2: 152-56, December 1918.
 The need for pre-school examination of children.
336. **Boyd, Edith L.** No such thing as overstudy. Primary education, 27: 73-74, February 1919.
 Claims that breakdowns which are often attributed to overstudy are merely the result of malnutrition, worry, or similar conditions.
337. **Roberts, Lydia.** A review of some recent literature on malnutrition in children. Journal of home economics, 11: 5-12, January 1919.

PHYSICAL TRAINING.

338. **Barclay, Lorne W.** The significance of the boy scout movement to physical education. American physical education review, 24: 10-16, January 1919.
 Read before the American physical education association, Philadelphia, April 12, 1918.
 Says that scouting means preparedness, mental, moral, and physical.
339. **Hanmer, Lee F.** The Gary public schools; physical training and play. New York, General education board, 1918. xix, 35 p. plates, tables. 12°.
340. **Warden, Randall D.** The daily after-school athletic life of boys. Mind and body, 25: 369-77, January 1919.
 Read before the American physical education association, Philadelphia, April 11, 1918.
 Also in American physical education review, 24: 1-9, January 1919.
 After school activities of elementary and high school boys. Writer says that athletics should be both compulsory and voluntary.

SOCIAL ASPECTS OF EDUCATION.

341. **Reaney, M. Jane.** The organization of recreation. *Child* (London) 9: 106-9, December 1918.
342. **Tyner, Bunyan Y.** The school a social asset. *Virginia journal of education*, 12: 211-13, February 1919.

The scope of work for our modern schools and the methods of procedure.

CHILD WELFARE.

343. **Cohen, I. David.** Investigation into the cases of one hundred boys who left school to go to work. *Educational foundations*, 30: 239-43, February 1919.
- An investigation of conditions existing before the war as affecting the boys who left school to go to work. In the next issue the conclusions and recommendations will be discussed.
344. **Heniger, Alice Minnie Herts.** The kingdom of the child. New York, E. P. Dutton & company [1918] xiv, 173 p. front., plates. 12°.
345. **National child labor committee.** Child welfare in North Carolina; an inquiry by the National child labor committee for the North Carolina conference for social service, under the direction of W. H. Swift. New York, National child labor committee, 1918. 314 p. 8°.
- CONTENTS.—1. Introduction, by W. H. Swift.—2. Dependency and delinquency, by Mabel Brown Ellis.—3. Child-caring institutions, by Mary Elizabeth Barr.—4. Agriculture, by Charles E. Gibbons.—5. Rural school attendance, by Eva Joffe.—6. Child labor, by Theresa Wolfson.—7. Law and administration, by W. H. Swift.

MORAL EDUCATION.

346. **Howard, Frank E.** Scholarship and morality in college. *Education*, 39: 335-38, February 1919.
- Emphasizes the moral as well as spiritual significance of scholarship.
347. **Peters, Charles Clinton.** Selection and organization of materials for a course in "The control of conduct" for secondary schools. Spring city, Pa., The Inter-borough press [1918?] 120 p. 8°
- A thesis presented to the faculty of the graduate school in partial fulfillment of the requirements for the degree of Doctor of philosophy.
- Bibliography: p. 111-120.

RELIGIOUS EDUCATION.

348. **Coe, George A.** Do you really believe in religious education? *Religious education*, 14: 5-11, February 1919.
- An address delivered before the Federated churches of Cleveland.
349. **Education under religious auspices.** *American college bulletin*, 2: [1-8] January 11, 1919.
- "This statement was prepared some months ago at the request of the U. S. Bureau of education for the biennial report. As the war has caused a considerable delay in issuing that publication, it seems advisable to present this survey at once."—B. W. Brown.
- A survey of recent progress in church education.
350. **Hancher, John William, comp.** The educational-jubilee, a chronicle and a forecast. Cincinnati, The Educational-jubilee commission of the Methodist Episcopal church [1918] 442 p. front., plates, ports. 8°.
- The announcement of thirty-five millions of resources added to the treasuries of the academies, colleges, universities, theological schools, and Wesley foundations of the Methodist Episcopal church is the formal message of this volume. The movement to collect these funds was named the educational jubilee of the Methodist Episcopal church.
351. **Jordan, Louis H.** The study of the history of religions in the Italian universities. *American journal of theology*, 23: 41-60, January 1919.
352. **Lawrence, William Irvin.** The social emphasis in religious education. Boston, Mass., The Beacon press [1918] 123 p. 12°.
353. **Northern Baptist convention.** Commission on religious education. Religious education through activity. *Religious education*, 14: 32-43, February 1919.
- A report prepared for and published by the Commission on religious education of the Northern Baptist convention. The report is here slightly abbreviated.

354. Richardson, Norman E. The religious education of adolescents. New York, The Abingdon press [1918] 191 p. 16°.

MANUAL AND VOCATIONAL TRAINING.

355. National association of corporation schools. Sixth annual report. Addresses, reports and discussions, New York, N. Y., July 1, 1918. [New York, Press of Andrew H. Kellogg company, 1918] 400 p. 8°. (Lee Galloway, secretary, New York university, New York, N. Y.)
Contains: 1. P. W. Towsley: An educational report on a cotton factory, p. 57-60. 2. May F. Melborg: Administration of corporation schools, p. 81-86. 3. G. E. Johnston: The establishment of a corporation school in an organization not having such an institution, p. 87-96. 4. Gertrude B. Thayer: Organization and administration of corporation school work, p. 97-127. 5. Report of committee on methods of instruction, p. 194-224. 6. Report of the committee on public education—Sec. 2, Continuation schools—the application of the Smith-Hughes vocational educational law, p. 237-60. 7. Report of the committee on retail salesmanship, p. 275-92. 8. Report of committee on technical training, p. 306-24.
356. Callen, A. C. Educating the coal miner in subjects pertaining to mining. Vocational summary, 1: 15-17, January 1919.
357. Giese, Henry and Partch, C. E. Industrial courses. An outline of courses in industrial arts. Ames, Iowa, Department of engineering extension, Iowa state college [1918] 87 p. illus. 8°. Adapted for use in the public schools of Iowa.
358. Haney, James P. What supervision seeks to do in the art department. Bulletin of high points in the work of the high schools of New York city, 1: 13-23, January 1919.
The aims and motives of art supervision in New York city.
359. Smith, K. G. Some fundamentals for vocational teachers. Vocational summary, 1: 17-19, February 1919.
Lecture at the opening session before the teacher-training classes at Duluth, Minn.
Discusses (1) The field of vocational education, (2) The purpose of vocational teaching, (3) Kinds of vocational work, (4) The three elements of a trade, (5) Two kinds of vocational teachers, (6) The requirements of a vocational teacher, and (7) Production and instruction.
360. U. S. Department of labor. Training employees for better production. Washington, Government printing office, 1918. 29 p. 8°. (Training and dilution service. Training bulletin no. 4)
A symposium of experiences in American factory training departments.

VOCATIONAL GUIDANCE.

361. Greener, George C. An experimentation in vocational guidance and placement. Industrial-arts magazine, 8: 41-46, 84-87, February, March 1919.
A sketch of the Vocational guidance and placement bureau of the North Bennet street industrial school in Boston.
362. Louisville, Ky. Woman's club. Vocational guidance survey. [23] p. 8°. Nannie Lee Frayser, chairman.
A study of the problems of vocational training and guidance in Louisville, Ky.

AGRICULTURAL EDUCATION; HOME ECONOMICS.

363. Balderston, Lydia Ray. Housewifery; a manual and textbook of practical housekeeping. Philadelphia and London, J. B. Lippincott company [1919] 353 p. illus. 8°. Chapter XIII, p. 318-40, is on Suggestions for teachers.
364. Browne, T. E. and Cook, Leon E. The teaching of vocational agriculture in secondary schools. West Raleigh, N. C., State college of agriculture and engineering, 1918. 54 p. illus. 8°. (State college record, vol. 17, no. 6, November 1918.)

COMMERCIAL EDUCATION.

365. Galloway, Lee. Office management; its principles and practice. Covering organization, arrangement, and operation with special consideration of the employment, training, and payment of office workers. New York, The Ronald press company, 1918. xxxi, 701 p. illus. 8°.

Part VI of this book, p. 447-561, is on Training and development of office workers. The chapter headings of this section are Selection of the right employee, Training and education of employees, Organization of an office training school, Outlining a course of study, The language of business—writing, The language of business—speech, Language of the executive.

366. Moreau, Félix. Le haut enseignement commercial et l'université. *Revue politique et parlementaire* (Paris) 97: 300-16, December 10, 1918.
367. Wooster, Harvey Alden. University schools of business and a new business ethics. *Journal of political economy*, 27: 47-63, January 1919.

Says that if our schools grow and the body of men trained in the profession of business increases, we may in time accomplish the desired end of raising the present standard of business ethics.

PROFESSIONAL EDUCATION.

368. Chapman, Lawrence B. The requirements of a course of training in naval architecture. *Engineering education*, 9: 119-30, December 1918.
369. Eldredge, Adda. Responsibility of the hospital to the training school. *American journal of nursing*, 19: 350-54, February 1919.
370. *Engineering education*, vol. 9, no. 5, January 1919. (Addresses at the joint meeting of the British educational mission to the United States and the Society for the promotion of engineering education, at Massachusetts institute of technology, Cambridge, Mass., December 6-7, 1918)
- Contains addresses on engineering education by E. M. Walker, Henry Miers, and John Joly of the British mission.
371. Jarry, Raymond. La formation de l'ingénieur en France et aux États-Unis. *Revue internationale de l'enseignement*, 38: 453-63, November-December 1918.

An extract from the *Revue de métallurgie*, no. 3, May-June 1917.

372. Mann, O. R. The effect of war on engineering education. *Engineering education*, 9: 108-18, December 1918.
373. Swain, George F. The liberal element in engineering education. *Engineering education*, 9: 97-107, December 1918.
- The necessity for motivating the liberal element in engineering education.
374. Wendell, George V. A study of engineering education. *Educational review*, 57: 120-28, February 1919.

A review of a bulletin on engineering education by C. R. Mann, published by the Carnegie foundation for the advancement of teaching (Bulletin No. 11).

CIVIC EDUCATION.

375. Dawson, Edgar. A conspicuous educational failure. *Historical outlook*, 10: 77-79, February 1919.
- Gives reasons for the wholly inadequate and disproportionate time provided for the study of government in the New York city high schools. Speaks of the statistical survey of instruction in civics recently published by the New York bureau of municipal research.
376. Lane, Franklin K. Americanism. *School life*, 2: 10-11, February 1, 1919.
- Address delivered in New York city, January 11, 1919.
- Also in part in *Americanisation*, 1: 2, 4, February 1, 1919.
- The spirit of Americanism and the spread of that spirit through the community council and the school.
377. Le grand devoir de la génération de demain—le travail. Aux enfants de toutes nos écoles, par Ernest Lavisse. Aux jeunes filles françaises, par M. P. Félix Thomas. *Revue pédagogique*, 73: 358-63, November 1918.
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No. 2 contains: 1. Grace S. Harper: Re-education from the point of view of the disabled soldier, p. 85-87. 2. Emmanuel Chastand: The vocational school for disabled soldiers at Nantes, France, p. 92-99. 3. L. Alleman: Should disabled men be re-educated in special schools? p. 100-104. 4. E. N. Thornton: The training of the disabled South African soldier and its lesson, p. 105-108. 5. F. K. Lane: Land settlement for disabled soldiers, p. 145-48.

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DEPARTMENT OF THE INTERIOR
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THE
ADJUSTMENT OF THE TEACHING LOAD
IN A UNIVERSITY

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THE ADJUSTMENT OF THE TEACHING LOAD IN A UNIVERSITY.

A. THE PURPOSE AND METHOD OF THE STUDY.

The purpose of the investigation.—Until the past decade or two educational administration has been notably laggard in attacking its problems by methods approximating the scientific. Tradition, sentiment, rule of thumb, temporizing compromise—these have been, and unfortunately, still are, the dominant methods in this important field of human enterprise. One of the largest of the problems in the administration of educational institutions is that of the proper method of determination of the working load of the members of the instructional staff. This problem has been with us ever since we have had schools. Administrators are only beginning to address serious efforts to its scientific solution. This is true even in our higher institutions, to which, because they have been the protagonists of scientific method, we should first turn for the light of example on such a significant problem. The investigation reported here is a pioneering attack upon this problem as it concerns colleges and universities. Being a pioneering study, it is admittedly defective and subject to improvement. At many points, as will be indicated, it is not safe to draw conclusions, and some of the conclusions drawn must, of course, when more and better facts are available, turn out to be inconclusive. It is believed, however, that there is here demonstrated a *method* of determining teaching loads for the instructional staff of a higher institution that is deserving of wider application—a method that is much more objective and reliable than the methods of tradition, sentiment, rule of thumb, and temporizing compromise that are now in use. It is believed, further, that there are a number of specific conclusions that will commend themselves to the judgment of many for their immediate applicability.

The method of the investigation.—In his attack upon the problem under consideration the writer began by assuming that there are but two factors which determine the actual working load an individual instructor is carrying—(a) the time consumed in the performance of his several functions as a member of a faculty and (b) the fatigue

resulting from such performance. There is large ground for the belief that the former is of much greater importance than the latter and will for the most part comprehend it. Although no studies of mental fatigue of members of a teaching staff have been made, a number of experiments have been conducted with school children which tend to discount very much the general belief in the large influence of mental fatigue upon efficiency in mental work. Even though members of a university faculty are no longer children, they must be subject to the operation of similar laws of mental economy, and therefore it will be pertinent to quote what two psychologists say in summary of the significance of these experiments. Freeman¹ says: "Fatigue is undoubtedly one of the factors which affect the efficiency of our work, but recent studies with school children have indicated that the amount of fatigue which we may expect to appear as a result of the ordinary work of the school day is much less than was formerly supposed." Thorndike,² after citing through several pages the main findings of a number of investigations, says: "There is a remarkable unanimity in the results summarized in this section in showing that ability to work is, in school pupils, throughout and at the close of the school session, almost or quite unimpaired." These statements concern *mental*, not *physical*, fatigue. The former is the type which would be our primary concern in this study if we should have need to give either of them consideration, since there is but a relatively small proportion of physical activity involved in the work of the university instructor.

Thorndike,³ after reviewing the experiments investigating the relations of "muscular" work and fatigue to "mental" work and fatigue, concludes "that surely there is no uniform effect of muscular work upon mental efficiency and that the average intrinsic effect of moderate amounts of it is very slight." Furthermore, we must bear in mind that these statements concern actual *decrease in efficiency* of mental work, not the *feelings of weariness* which, according to Thorndike,⁴ "from what little is known of them, * * * seem a very poor symptom of the loss of ability." Thus, although the fatigue resulting, e. g., from conducting a clock-hour lecture may not be the same as that of an hour of recitation or of laboratory, or, again, that resulting from an hour of recitation in mathematics may not be the same as that of an hour of recitation in law, because the influence of mental fatigue is not large in any event, there is not much justification for the contention that discrimination should be made in fixing

¹ Freeman, F. N. *How Children Learn*. Boston. Houghton, Mifflin & Co. Chapter XIV, Mental Economy and Control, Mental Hygiene, p. 288.

² Thorndike, E. L. *Educational Psychology*, Vol. III. Teachers College. Chapter IV, The Influence of Continuous Mental Work, Special or General, upon General Ability, p. 97.

³ Op. cit., p. 109.

⁴ Op. cit., p. 107.

the teaching schedules on the basis of fatigue, even if such fatigue were measurable. As already implied, it is much more important that, if large differences in time consumed in connection with clock hours of instruction are found, these be given recognition in such discriminations as are made. This opinion has the additional support of the fact already stated that discriminations based upon the total time investment in connection with a clock hour of instruction will also in considerable part comprehend the factor of fatigue.

The data concerning time consumed in their activities by teaching members of the faculty of the University of Washington which are used in this study were secured by means of a questionnaire which is reproduced in the appendix. It will be noted that the instructor was asked to report on time spent in his professional activities during one school week, May 14 to 19 (1917), inclusive. It will be seen also that such questions as appear on sheet 1 call, for the most part, for the time spent in non-teaching activities. An exception to this is question 1. Attention will be called to other less significant exceptions as they arise in presenting and interpreting the facts in the main body of this report. Questions 2, 3, and 4 ask for reports on the more purely noninstructional professional activities of teaching members of the faculty. Sheet 2 of the questionnaire was devised to secure a statement of all time spent in instructional work, including time spent in carrying on the class work, time required for immediate preparation for the work, in correcting papers of students in the classes, etc. This sheet, with question 1 of sheet 1, was designed to ascertain the "total time consumed" in the more purely instructional activities of the members of the teaching staff of the university.

The details of the methods of using the data gathered by means of the questionnaire will be described at appropriate points in the succeeding sections of this report.

B. THE WORKING LOAD OF MEMBERS OF THE FACULTY OF A UNIVERSITY.

How much time per week and per day is actually spent by the members of the faculty of a university in connection with instructional work both in class and out? How much time is devoted to personal research and to other noninstructional professional activities? What constitutes the total working week and working day for those employed to teach in a university? These and some closely related questions are pertinent to the solution of the problem of determining the teaching load and will be answered from the data assembled for

the investigation before proceeding to the task of analyzing the influence of what we may term the factors of the teaching load.

The total teaching time.—Total teaching time is here understood to comprehend all work of an instructional character, including time spent in class, in preparation for class sessions, and in reading papers or doing other work connected with such class sessions, as reported on sheet 2 of the questionnaire. It includes also the time spent in the supervision of students working on individual research problems as reported under the first inquiry on sheet 1. It does *not* include work in connection with extension courses, nor such instruction as may have been given during office hours reported in inquiry 3 on sheet 1 of the questionnaire. The "teaching days" in hours of the members of the faculty in the University of Washington are shown in Table 1. The teaching day has been arrived at by dividing the total teaching time for the week by $5\frac{1}{2}$, the number of teaching days in the school week at the time the data were collected.

TABLE 1.—*Teaching day of instructors in the University of Washington.*

Length of teaching day, in hours.	All instructors.	Instructors not deans, librarians, nor subdi- vised for research.	Instructors not deans, heads of depart- ments, librarians, nor subdi- vised for research.	Heads of other than one-man depart- ments.	Deans.
1	2	3	4	5	6
2.0-2.9.....	8	2	1	1	3
3.0-3.9.....	9	7	5	2	1
4.0-4.9.....	17	16	14	2	1
5.0-5.9.....	27	26	21	5	1
6.0-6.9.....	12	12	12	.....	.....
7.0-7.9.....	14	13	13	.....	1
8.0-8.9.....	6	6	4	2	.....
9.0-9.9.....	2	2	1	1	.....
10.0-10.9.....	4	4	4	.....	.....
13.0-13.9.....	1	1	1	.....	.....
Total number in group.....	100	89	76	13	7
Average number of hours in teaching day ¹ for group.....	5.8	6.0	6.1	5.5	4.2

¹ Not computed from this table, but from original figures for the teaching day of each member of the faculty used in making the table.

The import of the table is perhaps so obvious as to require only brief interpretation. In column 2 of this table is shown the distribution of these teaching days of 100 members of the faculty whose responses in the questionnaire were made in such a manner as to permit the computation of the length of the teaching day. No member of the faculty who is employed by the university for part time only is represented in this column. It includes the teaching days of 7 deans,

3 librarians devoting only part time to instruction, 1 instructor subsidized for research and devoting only half-time to instruction, and 13 heads of other than one-man departments who are not deans. These 100 teachers are approximately three-fifths of those on the instructing staff of the university at the time reports were called for.¹ It is to be noted that the teaching day ranges in length from 2 hours to 13.9 hours—a strikingly wide variation. The distribution is in rough approximation to the curve of normal frequency, the modal number of hours in the teaching day being 5-5.9. The average teaching day, computed not from the table but from the original figures for the teaching days of each member of the faculty, is 5.8 hours. Column 3 reports the teaching days of 89 instructors, excluding 7 deans, 3 librarians, and 1 instructor subsidized for research, and shows a range and distribution of teaching days very similar to that in column 2, the essential difference, as is to be expected, being the smaller number of short teaching days in column 3. The model teaching day is still the same, while the average is only slightly greater, 6 hours, as compared with 5.8 hours for the entire group of 100 instructors. Column 4 shows the distribution for the 76 instructors remaining after excluding those already excluded in column 3 and also 13 heads of other than one-man departments who are not at the same time deans. We have thus remaining in column 4 the teaching days of those who are given no special remissions of teaching hours for administrative and other activities. We find in this column the same range and much the same distribution of hours in the teaching day as before, with an average teaching day but one-tenth of an hour longer than shown in the preceding table.

This table also presents in columns 5 and 6, respectively, the teaching days of 13 heads of other than one-man departments and of 7 deans. The former group includes no heads of departments who are also deans, as these have been included in the group of deans. The teaching days of these two groups are given special attention at this point because they include the officers of administration who are allowed remissions of teaching hours for the work of administration. Columns 5 and 6 of the table show that they devote less time to teaching work than do those whose teaching days are tabulated in column 4. The difference is striking in the case of the deans who devote approximately two-thirds as many hours per day to teaching work as do the members of the group in the column mentioned. It is less striking for the heads of departments who spend approximately

¹ A total of 110 instructors filled out the questionnaire, but for one reason or another the responses of 10 could not be used for this portion of the study.

eleven-twelfths as much time to teaching work as do those in the nonadministrative group.

Time spent in the supervision of students working on individual research problems.—Mention has been made (p. 8) of the fact that time spent in supervising students working on individual research problems has been included in the total teaching time of the instructors reporting for this investigation. Only 43 of the group of 100 instructors whose reports were used in studying the total time devoted to teaching report students working on such problems during the second semester of the school year 1916-17. Fifty-seven instructors, more than half, report no such supervision. The 43 responsible for instruction of this sort report a total of 124¹ students—an average of about 3 students per instructor. The total amount of time spent in such supervision by all members of the faculty reporting during the week of May 14-19 was 94.8 hours, or an average of 0.76 hour per student. This total of 94.8 hours is slightly less than 3 per cent of the total of 3,172 hours spent in all instructional work during that week by the entire group of 100 instructors. Whether it is an important consideration in adjusting the teaching load must be determined largely by the number of such students the individual instructor is supervising.

Some light is thrown on this problem by Table 2, which shows the distribution of such students according to the responses in the questionnaire. If we recall that the average weekly time expenditure per student in work of this nature is but 0.76 hour, it will be seen by reference to this table that a relatively small number of instructors will need to have such an adjustment made for them. If no adjustment has already been made in assigning to the instructors the courses in which these students are enrolled, it will be advisable to make some reduction in the teaching schedule of those who must supervise the work on individual research problems of four or more students.

Time spent in all noninstructional activities.—The aspect of the working load of members of the faculty of a university to which we now direct our attention is the total time spent in activities comprehended by questions 2, 3, and 4 on sheet 1 of our questionnaire (see appendix). It is to be noted that these inquire after time spent in personal research, in "other official duties for the university (office hours, committee work, administrative functions, etc.)," and in "professional activities not otherwise reported."

¹ In this number have been included only those students who were enrolled in courses regularly listed as courses in individual research. The number does not include those students working on semester theses in courses devoted largely to regular class instruction.

TABLE 2.—*Distribution of students working on individual research problems.*

Number of students.	Number of instructors.
0.....	57
1.....	18
2.....	5
3.....	7
4.....	5
5.....	1
6.....	3
7.....	1
8.....	2
9.....	1
Totals..... 124.....	100

Although the term is in a slight measure a misnomer, this part of the working load will be referred to here as the noninstructional load. The partial inapplicability of the term is illustrated by the fact that the personal research (see question 2, sheet 1, appendix) may sometimes be rightly considered direct, or almost direct, preparation for class work. However, the difficulty of distinguishing between such personal research and preparation for class work is mentioned by but 2 of the 100 instructors whose answers are used in the present section of this investigation. Again, office hours (see question 3, sheet 1, appendix), especially of instructors other than deans and heads of departments, are at once seen to be set aside in part or whole for instructional purposes. That a few of the "professional activities not otherwise reported" (see question 4) are instructional in character may be seen by referring to Table 3, which shows the frequency with which the many sorts of "professional activities not otherwise reported" recurred in the reports of 100 instructors. "Miscellaneous work connected with teaching" may in three of the six cases be properly classified as instructional. The same may be said of all four instances of "work on future courses." One of the reports classified under "Special conferences with members of faculty or students" was probably instructional. The remainder of the classifications are not chargeable to instructional time, in the sense in which this term is here being used. Under "Professional reading" has been included only general professional reading, not that which is calculated to prepare for a specific course. "Extension work," although instructional, is not work done in connection with instructional work going forward on the campus. On the whole, the term "noninstructional" is seen to be fairly applicable.

TABLE 3.—*Classification of "Professional activities not otherwise reported."*

Activity.	Number of times reported.
Professional service for public.....	17
Professional societies or clubs.....	17
Professional reading.....	12
Extension work.....	9
Public lectures and addresses.....	9
Miscellaneous work connected with teaching.....	6
Work on future courses.....	6
Military drill (faculty company).....	4
Cooperation in student activities.....	4
Special conferences with members of faculty or students.....	4
Work on material intended for publication.....	3
Work on university plant.....	3
Professional correspondence.....	3
Professional investigation (not research).....	2
Red Cross parade.....	2
Faculty meeting ¹	2
Faculty forum meeting.....	2
Departmental meeting.....	2
Miscellaneous.....	5
Total number of different instructors reporting these activities.....	64
Number reporting no such activities.....	36

¹ As there was no faculty meeting held during the week of May 14-19, it is probable that these two reports refer to attendance upon a meeting of the faculty forum, a voluntary and unofficial body attendance upon whose meetings is reported as a type of activity immediately following this type by two other members of the faculty.

Having set down such qualifications as need to be made on the use of the term, we next proceed to a brief study of this noninstructional load of the 100 members of the faculty of the University of Washington whose reports could be utilized for this purpose. The distribution of the members of the faculty by hours per day spent in such activities is shown in Table 4. Column 2 of this table displays the distribution for all these instructors. Of the entire group, 19 spend less than one hour per day in these noninstructional activities.¹ Of the entire group 78 spend less than 4 hours in this way, only 22 reporting 4 hours or more. The average for all is 2.7 hours per day. Columns 3 and 6 in this table are introduced to detect the influence on the noninstructional load of holding administrative offices or performing certain other functions for the university. Column 3 gives the distribution for the 89 instructors remaining after the figures for 7 deans, 3 librarians devoting only part time to instructional work, and 1 instructor who is subsidized for noninstructional work have been excluded. Their elimination is at once seen to decrease the distributions in the larger classifications, 9 of the 11 eliminated reporting four hours or more of noninstructional work. The influence of this elimination may also be seen in the average, which is here 2.4 hours per day. The next column excludes in addition the figures for 13 heads of other than one-man departments (who are not also deans). This further exclusion is seen again to reduce the num-

¹ A footnote to the table calls attention to four members who report no work of this sort.

bers in the larger classifications, while the average number of hours spent in noninstructional activities by these 76 instructors is but 2.2. Columns 5 and 6, respectively, present the distribution for 13 heads of other than one-man departments and for 7 deans. The average for the former group is 4.1 hours, and for the latter 4.6 hours.

TABLE 4.—*Time spent in activities largely noninstructional in character (personal research, office hours, administrative duties, committee work, and other professional activities) by members of the faculty of the University of Washington.*

Number of hours per day.	All instructors.	Instructors exclusive of 7 deans, 3 librarians, and 1 other instructor.	Instructors exclusive of 7 deans, 13 heads of other than one-man de- partments, 3 librarians, and 1 other instructor.	Heads of other than one-man de- partments.	Deans.
1	2	3	4	5	6
0.0-0.9.....	1 19	1 19	1 19	.....	.....
1.0-1.9.....	22	22	21	1	.....
2.0-2.9.....	18	16	13	3	2
3.0-3.9.....	19	19	16	3	.....
4.0-4.9.....	8	6	4	2	2
5.0-5.9.....	6	3	1	2	2
6.0-6.9.....	5	2	1	1	.....
7.0-7.9.....	.....	.....	.....	.....	.....
8.0-8.9.....	2	1	.....	1	1
9.0-9.9.....	1	1	1	.....	.....
Number in group.....	100	89	76	13	7
Average number of hours per day.....	2.7	2.4	2.2	4.1	4.6

¹ Four of these report no such activities.

In the tabulations of the time devoted to the several kinds of work done by an instructor during the week under consideration the writer has assumed an almost uncritical attitude—i. e., he has assumed that the instructor reporting has been justified in including all the time and activities that he has reported. Pains were taken, of course, in framing the questionnaire that only time spent in legitimate professional activities should be reported, and it is felt that the responses are fairly free from reports on other than such legitimate activities. Nevertheless, it is doubtful whether a questionnaire could be so framed or a hundred copies of the questionnaire could be so filled as to eliminate entirely all extraneous activities. Although assuming the uncritical attitude to which reference has been made and regarding as legitimate all work reported in the tabulation, the investigator became conscious of a possible source of error in the mode of statement of question 4 on sheet 1 of the questionnaire.¹ It is probably certain that, because those who filled out the questionnaire were not definitely directed to exclude from their answer to this ques-

¹ See appendix.

tion all professional activities for which they were receiving remuneration from other than university sources, and exclusive of salary received as officers of the university, some such professional activities have been here reported. We may here refer again to Table 3, which presents a classification of these activities, in furnishing corroboration of the statement just made. In the first group, "Professional service for public," are included only a very few for which such outside remuneration may have been received. The group reporting attendance upon, or activity in connection with, "Professional societies or clubs" manifestly would include none receiving such remuneration. Most of those whose reports are included under "Extension work" are receiving some small additional remuneration for the work. The total amount of time here does not exceed a few hours. The "Public lectures and addresses" may include a few commencement addresses for which outside remuneration is customarily received. One of the six in the next group in the table is reported as "tutoring out-of-town pupils," for which it is possible the instructor received some remuneration. A careful examination of the reports shows no other activities for which outside or additional remuneration may have been received. It does, however, discover a few reports of additional activities which need not be quoted here, because of the small amount of time devoted to them, and which are doubtfully chargeable to the working load of a member of the faculty of a university.

TABLE 5.—*Time devoted to personal research by instructors in the University of Washington.*

Number of hours during the week.	All instructors.	Instructors exclusive of deans, librarians, and 3 other instructors ¹ .	Heads of other than one-man departments.	Deans.
1	2	3	4	5
0.0-1.9.....	54	45	8	4
2.0-3.9.....	7	5		2
4.0-5.9.....	14	14	1	
6.0-7.9.....	11	10	1	
8.0-9.9.....	4	3	2	1
10.0-11.9.....	3	3		
12.0-13.9.....	2	2	1	
14.0-15.9.....				
16.0-17.9.....	1	1	1	
18.0-19.9.....				
20.0-21.9.....	1	1		
22.0-23.9.....	1	1		
24.0-25.9.....	1	1		
41.0.....	1	1		
Total number in group.....	100	87	13	7
Average number of hours in personal research during week.....	3.7	4.1	3.6	2.1

¹ These by agreement perform other services for the university in time not spent in teaching.

² Includes 48 who carried forward no research during the week.

³ Includes 39 who carried forward no research during the week.

⁴ None of these carried forward research during the week.

A careful estimate of all time spent in such professional activities doubtfully chargeable to the working load of the faculty member does not place the maximum total above 80 hours for the week for all instructors. It is probably considerably less than this. But, taken at this maximum estimate, it would be but 0.15 hour per day per instructor, and could therefore introduce only a proportionally small and almost inconsiderable error into the computation of the average noninstructional load or total working load of instructors.

Time spent in personal research.—It will be profitable now to proceed to a more detailed study of the noninstructional load of a university faculty by scrutinizing successively the three main parts into which it may be divided, parts implicit in questions 2, 3, and 4 on sheet 1 of the questionnaire. The first part is that comprehended by what we have termed "personal research."¹ The main facts as to time spent in this work during the week upon which we have reports are presented in Table 5. Column 2 of this table shows that 54—more than half—of the group of 100 instructors whose reports could be used for this part of the investigation spent very little or no time in research. In fact, as indicated in a footnote to the table, all but 6 of this group of 54 (i. e., 48 instructors), report no time spent in this way. In other words, practically half of all the instructors reporting for this investigation spent no time in research. The remaining instructors, 52 in number, spent from a fraction of an hour to 41 hours in this kind of activity during the week. Most of these, however, reported less than 8 hours of research. The average number of hours per week, computed not from the distribution in column 2 but from the original figures for individual members of the faculty, is 3.7, which is approximately two-thirds of an hour per day.

As it may by some be considered unfair to pass a judgment upon time devoted to research by members of a group, some of whom are, by the nature of their positions, prevented from carrying forward any personal research, in column 3 of Table 5 has been introduced the distribution in numbers of hours spent in research by those from whom we are more nearly justified in expecting research. From the group here concerned have been excluded 7 deans, 3 librarians devoting only part time to instruction, and 3 other instructors by agreement with the university performing other services for it in the time not spent in teaching. The exclusion of these can not markedly affect the distribution of instructors as to time spent in research, although the reduction in numbers of instructors is largely in the

¹ The term "personal research" is here used to distinguish the research being carried forward by the member of the faculty himself from that which students are working out under his supervision.

classifications devoting small amounts of time. Here, again, a footnote calls attention to a very large number who spent no time in research. The average amount of time so spent—4.1 hours per week—is seen to be somewhat higher, indicating a small measure of justification for the charge preferred in the opening sentence of this paragraph. Nevertheless, if this week of May 14–19 may be taken to be a representative cross section of a working year in this university—and there is little occasion for believing it to be markedly otherwise—one of the lines of activity a university is expected to encourage, viz, research on the part of its faculty, is being far from generally pursued, although some are devoting generous amounts of time to it.

In columns 4 and 5 of this table are presented the facts as to research time, respectively, of heads of other than one-man departments and of deans. The former devote slightly less time on the average to research than do those whose research time is tabulated in column 3, while the latter, as is to be expected because of their burden of administrative work, spend notably less time—in fact, about one-half as much.

TABLE 6.—*Time spent in other official duties (office hours, committee work, administrative functions, etc.) by members of the faculty of the University of Washington.*

Number of hours per week.	Full-time instructors.	Heads of other than one-man de- partments.	Deans.
1	2	3	4
0.0–1.9.....	31		
2.0–3.9.....	17	1	1
4.0–5.9.....	11		
6.0–7.9.....	8	2	
8.0–9.9.....	3	4	
10.0–11.9.....	4		
12.0–13.9.....		2	1
14.0–15.9.....	1	1	
16.0–17.9.....	1	1	
18.0–19.9.....		1	
20.0–21.9.....			1
22.0–23.9.....			2
24.0–25.9.....			1
26.0–27.9.....			1
28.0–29.9.....			
30.0–31.9.....		1	
32.0–33.9.....			
34.0–35.9.....			
36.0–37.9.....			
38.0–39.9.....			
40.0–41.9.....			
Total number in group.....	76	13	7
Average number of hours per week.....	3.6	15.1	18.3

Time spent in other official duties (office hours, committee work, administrative functions, etc.).—A second portion of the noninstructional load deserving some special attention is the time spent in “other official duties for the university (office hours, committee work, administrative functions, etc.),” a report on which was called for in inquiry 3 on the first sheet of the questionnaire (see appendix).

Table 6 presents the distribution in hours per week in this work for 76 full-time instructors; i. e., all instructors remaining in our total group of 100 after excluding deans, librarians, heads of other than one-man departments, and one other instructor subsidized for investigation (column 2), for 13 heads of other than one-man departments (column 3), and for 7 deans who are also heads of departments (column 4). At the foot of the distribution columns are shown the averages for each of these groups. As is to be expected, both the distributions and the averages indicate a marked tendency toward an increase of time required for these activities as we proceed from the full-time instructors through the heads of departments to the deans. The fact that the average for the heads of departments is within approximately three hours of that for deans may be partially explained by the one head of department reporting 41.3 hours of such activity for the week. The average for the 12 remaining heads of departments is 10.4 hours. If the medians—this measure of central tendency not being as susceptible of the influence of extreme cases as is the average—were computed, they would be approximately 3, 9, and 23 hours, respectively, for the three groups. It is clear that the burden of work of this nature does not rest heavily on more than relatively few of the full-time instructions, and where it does not exceed five or six hours per week there can be little necessity of making special allowance on the teaching schedule for it. For full-time instructors upon whom are made such exceptional demands for this type of activity calling for much more than the average of 3.6 hours per week, it would be but fair to make some such special allowance as just mentioned. If the figures presented in Table 6 are normal, heads of other than one-man departments should have some reduction of teaching schedule for such work and most deans should have an even greater reduction. Since the demand for such activity must be heavier for some heads of departments and deans than for others, it will be necessary to discriminate by making greater allowance to some than to others, the allowance being proportioned to the demands. The figures for the one week which were used in compiling Table 6 do not warrant us in here making recommendations as to what these allowances should be for particular heads of departments or deans. Before doing this we should need reports covering a longer period of time.

Time spent in "professional activities not otherwise reported."—We have already given some attention to the many sorts of professional activity reported in answer to question 4 on the first sheet of the questionnaire—i. e., all professional activities exclusive of teaching work, personal research, and "other official duties for the university (office hours, committee work, administrative functions, etc.)."

As these additional professional activities may play an important part in determining the working load of a member of the faculty of a university, we now extend our analysis of the answers to the question. Unfortunately, the directions of question 4 called for the total amount of time spent in all such activities and for a list of them only, neglecting to request a statement of the time spent in connection with each kind of activity reported. A large proportion of the instructors volunteered the information just referred to, but because a number did not supply it our analysis can give little more than a very imperfect account of the proportion of the total time spent in "professional activities not otherwise reported" which is devoted to each of the several classes of activity into which we have divided the reports. However, some estimate of this proportional relationship may be made from the numbers of instructors reporting the several classes as presented in Table 7. These numbers of instructors are presented for each of the subjects or subject groups represented by at least 3 of the total number of 100 questionnaires used in this section of the report. A number of subjects are therefore not represented in the table. The classes into which these other professional activities have been divided are as follows: (*a*) General professional reading—i. e., professional reading not directly applicable as preparation for any particular course; (*b*) campus professional societies and clubs, such as the Philological Club or a colloquium; (*c*) extension work, usually correspondence instruction; (*d*) other off-campus professional activities, such as public addresses or other professional service for or in contact with the public; and (*e*) miscellaneous professional activities of many sorts, something as to the nature of which may be discovered by a glance through the categories of Table 3. Table 7 reports in addition the number of instructors reporting; (*f*) no other professional activities, as well as the average number of hours per week per instructor devoted to all of the classes of activity just named.

It is at once manifest that only for foreign language, mathematics, the sciences, and engineering are the numbers of instructors reporting large enough to give the figures in the remaining columns of the table even an approximation to dependability. Of the large group of 22 instructors of foreign language, 3 reported general professional reading, 5 reported activity in connection with a campus professional club, 1 reported time spent in extension work, 3 reported other off-campus professional activities, 3 reported miscellaneous professional activities, 9 reported no other professional activities, while the average number of hours per week in these activities is but 3.1, or slightly more than a half hour per day. A comparison of this distribution with that of some of the other groups and with the figures of totals in the lowest horizontal row shows a tendency in this subject group toward a relatively infrequent participation in off-campus

professional activities, a larger proportion of instructors devoting no time to these "other professional activities," and a smaller average number of hours per week per instructor in such activities. A similar tendency is evident in the figures for the instructors of mathematics. In contrast to these are the distributions for the sciences and engineering, in which a larger proportion report off-campus professional activities, a smaller proportion reporting no other professional activities and a higher average number of hours of such activities per week per instructor than do foreign language and mathematics. While the remaining subjects and subject groups are less adequately represented than the four so far named, the data shown concerning them may deserve at least passing mention. The average number of hours per week for 6 instructors of English is approximately that of the total of 84 instructors, data for whom are included in this table. The average for the social studies is surprisingly low, considering the nature of the subject taught by the instructors in this group—2 were teaching economics; 1, political science; 1, sociology; and 1, history. In the light of the nature of most of these subjects, one expects for most of them more time than the table reports. Although the nature of the subject is such as to require considerable touch with the public schools, the average for education is probably higher than normal. The average for psychology and philosophy is also probably higher than normal. The figures for home economics are not unlike those for the sciences. Those for law, because they are based upon the reports of but three instructors, are scarcely deserving of attention.

TABLE 7.—*Number of instructors devoting time to "professional activities not otherwise reported" and the average number of hours per week so spent.*

Subject or subject group.	Number of instructors reporting.	Number of instructors devoting time to—						Average number of hours per week per instructor.
		(a) General professional reading.	(b) Campus professional societies.	(c) Extension work.	(d) Other off-campus professional activities.	(e) Miscellaneous professional activities.	(f) No other professional activities.	
Foreign language.....	22	3	5	1	3	3	9	3.1
English.....	6	.....	.....	2	1	.....	3	4.6
Mathematics.....	8	1	.....	.....	.....	3	5	2.7
Social studies.....	6	1	.....	1	1	.....	3	3.0
Education.....	4	2	.....	1	4	.....	.....	13.7
Philosophy and psychology.....	4	2	.....	2	1	1	.....	10.4
Sciences.....	15	1	2	2	5	5	5	4.1
Home economics.....	4	1	.....	1	2	3	1	4.8
Engineering.....	13	1	.....	.....	6	2	3	6.0
Law.....	3	.....	.....	1	1	.....	2	3.3
Total.....	84	12	7	11	24	17	31	4.7

Notwithstanding the acknowledged weakness of the figures just cited, they have a general import that may not well be ignored. The

average number of hours spent in the activities under consideration, according to Table 7, is 4.7. When the average number of hours spent in such activities is computed for the entire group of 100 instructors, it is found to be 5.5. Thus the average may be said to approximate 5 or 6 hours per week. The statement is occasionally made that reductions in the teaching schedule should be made to allow for these activities. It must be evident at once from the figures presented that it would be unwise to make a uniform allowance for all subjects and all instructors; some subjects are of such a character as to require more time than others in the professional activities under consideration. The more reasonable procedure would be to make no such allowance except for subjects where the average number of hours per week exceeds markedly the average here found, 5 or 6. There are no doubt subjects for which and instructors for whom such concessions should be made. In general these will be the newer and more rapidly developing subjects—what we may term the *dynamic* subjects—and the instructors of these subjects who are keeping fully abreast of the developments in them. As soon as it appears that such concessions are no longer necessary or are no longer properly utilized, they should be withdrawn. Because of the paucity and weakness of the figures for subjects and subject groups as here reported, before the extent of such concessions may be justly determined, a supplementary investigation should be made into the time spent in these other professional activities either by a larger number of instructors, or through a longer period of time, or both. Such a supplementary investigation should make the additional distinction between other professional activities that bring additional remuneration and those that do not, since the justice of making concessions for activities for which the instructor is receiving adequate additional remuneration is bound to be called into question.

TABLE 8.—*The working day of 100 instructors in the University of Washington.*

Length of working day in hours.	Number of instructors.
4.0—4.9.....	4
5.0—5.9.....	10
6.0—6.9.....	14
7.0—7.9.....	15
8.0—8.9.....	14
9.0—9.9.....	17
10.0—10.9.....	10
11.0—11.9.....	11
12.0—12.9.....	1
13.0—13.9.....	3
14.0—14.9.....	1
Total number of instructors.....	100
Average working day in hours.....	5.5

The total working load of members of the faculty of a university.—Table 8 shows the distribution of 100 members of the faculty of the University of Washington as to number of hours in the total working day.¹ The total working day of each instructor has been obtained by adding together what has previously been reported in this study as the total teaching time per day and the time spent per day in noninstructional activities, the actual total working day charge—all time spent in connection with class work both within and without the class period (see sheet 2 of the questionnaire reproduced in the appendix), time spent in the supervision of students working on individual research problems (question 1, sheet 1), time spent in personal research (question 2), time spent on "other official duties for the university (office hours, committee work, administrative functions, etc.)," and, lastly, time spent in "professional activities not otherwise reported." This table discloses a remarkably wide range in the length of the total working day, from 4 hours to 14.9 hours—a difference of nearly 11 hours between the shortest and the longest working days in this group of 100 instructors. However, relatively small numbers are to be found in the 4–4.9 hour group at the lower extreme and in the 12–12.9, 13–13.9, and 14–14.9 hour groups. Fairly large and approximately equal numbers—from 10 to 17—are to be found in each of the intervening groups. Thus the distribution here does not, as with the teaching day (see Table 1), remotely resemble the curve of normal frequency; nor is there a marked modal length of working day. The average length of working day is 8.5 hours, remarkably near the 8-hour day being advocated and carried into effect by legislation for other occupations. From what has been said above (p. 16) in the discussion of the facts concerning time spent in noninstructional activities. Thus this total working day includes able to the university may be slightly less than the average of 8.5 hours here reported, but the maximum error due to the introduction of such extraneous professional activities can hardly be more than 0.15 of an hour.

Relationships of the components of the total working load. (a) Hour and percentage relationships.—Thus far in this part (B) of this report we have presented the facts concerning time spent in instructional activities, in all noninstructional activities (including personal research, official duties for the university, and professional activities not otherwise reported), and also concerning the total working load of members of a university faculty. As we have not yet directly investigated the relationships that may exist between the components of the total working load, we now turn to this important phase of our main problem.

¹ Computed on the basis of the 5½-day teaching week in operation at the time the data were collected.

The relationship may first be studied by comparing the average number of hours spent in each of the different kinds of work and in all work by members of the faculty. These averages will be found in Table 9. Besides presenting the averages for teaching work (columns 2 and 3), personal research (columns 4 and 5), noninstructional activities (columns 8 and 9), and all working time (columns 10 and 11), this table indicates the average number of hours devoted to "other activities" (columns 6 and 7), i. e., to noninstructional activities not including personal research. The facts are made somewhat clearer by Table 10, which presents the percentages the average number of hours spent in each of the different activities are of the average total working time per week. This table shows that the average per cent of the total working time spent in connection with teaching work for the entire group of 100 instructors whose reports were usable for this part of our study was 68. Thirty-two per cent was spent in noninstructional activities and of this time 8 and 24 per cent, respectively, were devoted to personal research and to other noninstructional activities. When the reports for 7 deans, 3 librarians, and 1 other person not considered a full-time instructor are excluded, the average per cent spent in teaching work rises to 71, the per cent in noninstructional activities dropping to 29. For this group, research time is higher by 1 per cent than for the entire group of 100 instructors, while the per cent of time spent in other activities drops by 4. By excluding, in addition to those excluded from group 2, 13 heads of other than one-man departments, thus leaving only those who may justly be considered full-time instructors, we note another rise in average per cent of time spent in teaching work, to 74, noninstructional activities consuming 26 per cent of the total time. Here we find no anticipated increase in the proportion of time spent in personal research, although we find a decrease in time spent in other activities. Heads of other than one-man departments, on the average, devote only 57 per cent of their working time to teaching, the remaining 43 per cent being spent in noninstructional activities. These heads of departments devote a somewhat smaller percentage of time to personal research than do those in the preceding group, and more than twice the percentage in other activities.

TABLE 9.—Average number of hours spent in teaching work, personal research, other activities, all noninstructional activities, and all work by members of the faculty of the University of Washington.

Group of faculty members.	Average number of hours devoted to teaching work.		Average number of hours devoted to personal research.		Average number of hours devoted to other activities.		Average number of hours devoted to personal research and other activities.		Total average number of working hours.	
	Per week.	Per day.	Per week.	Per day.	Per week.	Per day.	Per week.	Per day.	Per week.	Per day.
1	2	3	4	5	6	7	8	9	10	11
1. One hundred instructors ¹	31.7	5.8	3.7	0.7	11.4	2.1	15.1	2.7	46.8	8.5
2. Eighty-nine instructors (excluding 7 deans, 3 librarians, and 1 other person, none of these being considered full-time teachers).....	33.2	6.0	4.0	.7	9.4	1.7	13.4	2.4	46.5	8.5
3. Seventy-six instructors (excluding, in addition to those omitted from Group 2, 13 heads of other than one-man departments).....	33.7	6.1	4.0	.7	7.9	1.4	11.9	2.2	45.5	8.3
4. Thirteen heads of other than one-man departments (who are not also deans).....	30.1	5.5	3.6	.7	19.1	3.5	22.7	4.1	52.8	9.6
5. Seven deans.....	22.9	4.2	2.1	.4	23.3	4.2	25.4	4.6	48.3	8.8

¹ All instructors whose responses could be used in this part of the investigation, including deans, librarians, heads of departments, etc.

TABLE 10.—Average per cent of the average total working time spent in teaching work, personal research, other activities, and all noninstructional activities by members of the faculty of the University of Washington.¹

Group of faculty members.	Teaching work.	Personal research.	Other activities.	Non-instructional activities.
1	2	3	4	5
	Per cent.	Per cent.	Per cent.	Per cent.
1. One hundred instructors.....	68	8	24	32
2. Eighty-nine instructors (excluding 7 deans, 3 librarians, and 1 other person, none of these being considered full-time teachers).....	71	9	20	29
3. Seventy-six instructors (excluding, in addition to those omitted from Group 2, thirteen heads of other than one-man departments).....	74	9	17	26
4. Thirteen heads of other than one-man departments (who are not also deans).....	57	7	36	43
5. Seven deans.....	47	4	48	53

¹ Computed from the figures for "hours per week" to be found in Table 9.

The tendencies shown for deans are the same as those for heads of departments, except that, as is to be anticipated, they are much more marked for the former group. The total working time of deans is seen to be approximately equally divided between teaching work and noninstructional activities. Their average per cent of time spent in personal research is approximately half that for the preceding group, while the proportions of time spent in other activities and in teach-

ing work are almost identical. The essence of these facts may be presented in another way by saying, e. g., that, on the basis of reports made by 100 members and disregarding distinction between full-time instructors and those who devote part time to administration, for every three members of the faculty employed the university may expect the approximate equivalent of two members devoting all their working hours to teaching work and one all his time to noninstructional activities; that for every four full-time instructors employed the university may expect the approximate equivalent of three instructors devoting all their working hours to teaching work and one all his time to noninstructional activities; that for every two deans employed the university may expect the approximate equivalent of one devoting all his working hours to teaching work and one all his time to noninstructional activities; also, that for every 12 members of the faculty employed the university may expect the approximate equivalent of one member devoting all his working time to research.

(b) *The coefficients of correlation.*—An extension of large significance in the study of the relationships of the components of the total working load is made possible by the investigation of these relationships through the computation of the Pearson coefficient of correlation and the regression equations. These coefficients and equations are assembled in Table 11. In the left-hand column of this table are given the names of each pair of series of data for which the coefficients and regression equations have been computed. The coefficients and equations are seen to have been computed for three groups of instructors. The group of 100 includes all instructors whose reports have been so far utilized in this study, among them 7 deans; 3 librarians, devoting only part time to instruction; 13 heads of other than one-man departments; 2 instructors who, although carrying a full teaching load, by agreement with the university perform other services for it during the time not spent in teaching; and 1 instructor subsidized for investigation. The group of 87 omits the 7 deans, 3 librarians, and the 3 instructors last named. The group of 76 excludes also the 13 heads of other than one-man departments, but includes the 2 instructors who by agreement perform the "other services" for the university. The purpose of the grouping will become manifest as we proceed with the interpretation of the table.

The computation of these coefficients of correlation has made it possible to investigate the reliability of a statement frequently made, and an opinion frequently held, in university circles—viz, that a proper method of encouraging research includes as its most important feature a general reduction of the teaching schedule of all members of a faculty. This theory assumes that there is a rather constantly operating causal relationship between time spent in teaching and

time spent in research; that as the former increases, the latter decreases, and vice versa. If this were true we should find in Table 11 a large negative coefficient of correlation, which is not the case. It is negative but it is very small, not only when computed for the entire group of 100 instructors, but also for the group of 87 instructors and, again, for the group of 76 instructors; i. e., when only those who are expected to carry a full teaching load, and who have no large and specially assigned administrative or other function to perform, are considered.¹ The significance of these small negative correlations may be better appreciated after quotation from Rugg² on the meaning of coefficients of differing magnitudes:

The experience of the present writer in examining many correlation tables has led him to regard correlation as "negligible" or "indifferent" when r (the coefficient of correlation) is less than .15 to .20; as "present but low" when r ranges from .15 or .20 to .35 or .40; as being "markedly present" or "marked" when r ranges from .35 or .40 to .50 or .60; as being "high" when it is above .60 or .70.

TABLE 11.—*Coefficients of correlation and regression equations.*

Series of data used in computation.	Coefficients of correlation.			Regression equations.					
	100 instructors.	87 instructors.	76 instructors.	100 instructors.		87 instructors.		76 instructors.	
				x=	y=	x=	y=	x=	y=
A. (x) Time spent in teaching work with (y) time spent in personal research.....	-0.04	-0.06	-0.05	-0.07y	-0.02x	-0.10y	-0.04x	-0.06y	-0.03x
B. (x) Time spent in teaching work with (y) time spent in all noninstructional activities.	-0.36	-0.20	-0.11	-0.37y	-0.35x	-0.22y	-0.18x	-0.13y	-0.09x
C. (x) Time spent in teaching work with (y) time spent in noninstructional activities, exclusive of personal research	-0.34	-0.21	-0.07	-0.35y	-0.33x	-0.26y	-0.17x	-0.11y	-0.04x
D. (x) Time spent in noninstructional activities, exclusive of personal research, with (y) time spent in personal research.....	-0.18	-0.14	-0.10	-0.22y	-0.10x	-0.19y	-0.10x	-0.10y	-0.10x
E. (x) The sum of the time spent in teaching work and in noninstructional activities, exclusive of personal research, with (y) time spent in personal research.....	-0.16	-0.16	-0.11	-0.32y	-0.08x	-0.32y	-0.08x	-0.20y	-0.06x

The correlation between time spent in teaching work and that spent in personal research is therefore "negligible." That is to

¹ As has already been stated, in this group of 76 are included the two instructors who, although carrying a full teaching load, by agreement with the university perform other services for it during their working time not spent in teaching. Although they should not properly be in this group in the computation of the coefficient of correlation between teaching time and personal research, they are properly a part of it for some of the other coefficients computed, and to keep the groups identical, they are here included. Their presence affects the coefficient only slightly, invalidating no conclusions.

² Rugg, H. O. *Statistical Methods Applied to Education*. Houghton Mifflin & Co., p. 256.

say, an instructor who devotes a relatively large amount of time to teaching is almost as likely to devote a relatively large amount as he is to devote a relatively small amount of time to personal research; and, again, one who devotes a relatively small amount of time to teaching is almost as likely to spend a relatively small amount of time as he is to devote a relatively large amount of time to personal research.

It would be unwise and unfair to pass final judgment on the condition just described or to recommend on the basis of the findings so far mentioned an administrative practice for the adjustment of the teaching schedule that would be designed to promote research economically, without first giving consideration to the relationships between time spent in teaching and the remaining component of the total working load, the time spent in noninstructional activities exclusive of research, either in combination with the time spent in personal research or alone. When there are three components of a working load it is evident that a consideration of the relationships of two of them can not be complete if the relationships of the third are ignored. If a high negative coefficient of correlation should be found between the time spent in teaching and the time spent in all noninstructional activities (including both personal research and other noninstructional activities), our conclusion as to the negligibility of the relationship between teaching time and research time would be in considerable part invalidated. However, the coefficients for these two series of data, as set down in Table 11 under B, are seen to be small, although somewhat larger than for time spent in teaching and time spent in personal research alone. While the correlation is "present but low" when the data for all instructors, including deans, librarians, heads of departments, etc., are included in the computation, it drops to "negligible" when only full-time instructors without large and specially assigned administrative or other functions are included. Almost identical coefficients are found when time spent in teaching work and time spent in noninstructional activities, exclusive of personal research, are introduced in the computation (C in Table 11), which seems to indicate that such correlation as is found under B must be largely attributable to time spent in noninstructional activities exclusive of research. Furthermore, the correlations are highest when administrative officers and those with other specially assigned functions are included and most nearly negligible when they are excluded.

This point of possible weakness of the conclusion as to the almost negligible relationship between teaching time and personal research has been further pursued by obtaining the measure of the relationship between the two other sets of data—those given under D and E in the table. The former set gives the measures of correlation of

time spent in noninstructional activities exclusive of personal research with time spent in personal research. All three coefficients are so low as to show the correlation to be "negligible" and to prove these two components of the working load to be far from mutually exclusive. The latter set gives the correlations between (x) the sum of the time spent in teaching work and in noninstructional activities exclusive of personal research and (y) time spent in personal research. Here we see that when the coefficient of correlation is computed for the time spent in all activities (teaching, administration, office hours, etc.), exclusive of personal research and time spent in personal research, there results again a small negative coefficient; when the total working load is divided into these two parts, they are seen to be only to a slight extent mutually exclusive.

The regression equations of Table 11, introduced in order to give a somewhat fuller description of the relationships between the components of the total working load, also give support to the general conclusion drawn. The method of reading them from the table is as follows: For the two series of data under A for all the 100 instructors, these equations are $x=0.07y$, and $y=0.02x$. These equations may be said to signify that as the amount of time spent in teaching work increases by a unit of time, the time spent in personal research tends to decrease by only 0.07 of such unit; and that as the time spent in personal research increases by one unit, the time spent in teaching work tends to decrease by only 0.02 of a unit. A glance at the remaining equations will make clear that in no instance is there even a remote approach to equality in the values of x and y . In most cases they are nearer equality when data for all instructors, including deans, librarians, heads of other than one-man departments, etc., are introduced into the computation than when data for those only who have no large specially assigned administrative or other functions are included. Even in these cases an increase of one hour in x does not tend to bring a decrease in y appreciably above a third of an hour.

Because there are three series of data involved—viz, (1) time spent in teaching, (2) time spent in personal research, and (3) time spent in other noninstructional activities—it has been possible to extend this study of the relationship between them by a method of computation of multiple correlation demonstrated by Yule.¹ The coefficients of correlation obtained by this method are as follows:

¹ Yule, G. U. *Introduction to the Theory of Statistics*. London, Charles Griffin & Co., pp. 238-241.

answer. Unfortunately, the second portion of the question was so put that it was often far from clear whether the abnormality, if any, was in the direction of a lighter week, of a heavier one, or a normal one as to total load, being abnormal merely because of a shift of time from one component to another, as, e. g., less time spent in teaching work and more devoted to research. Despite this difficulty of interpretation, on the basis of the inner testimony of the answers, they were classified as follows: Of the 64 who reported the week as abnormal, (a) for 31 it was or was probably below normal, (b) for 6 it was or was probably above normal, (c) for 23 it was or was probably normal as to total working load, but abnormal because of a shift of time from one component to another, while (d) for 4 it was impossible to make any sort of conjecture as to the nature of the abnormality. By adding those under (b) and (c) in this subclassification to the 34 who affirmed the normality of the week, we have a total of 63 for whom the opinion as to the normality of the week was that the working load for the week was probably as great or greater than usual, as against 31 for whom it may have been less than usual. The testimony of the answers to this question thus seems to point toward a week to some extent under normal. However, the writer is inclined not to accept at its full value such an interpretation. Other than for a few members of the faculty carrying light teaching schedules at this time of year, in order to balance with a very heavy schedule during short courses no longer in session at the time reported upon, and for a few whose classes were so hard hit by the student exodus in the military emergency of the spring of 1917 that there were no students left in these classes, there could not have been many whose working load was notably diminished. The week was abnormal, certainly, but the abnormality consisted not so much in the diminished working load as in the general disturbance of a military crisis. Faculty members did not cease their work. Furthermore, it should be remembered that these opinions are merely opinions. Few or no members of a faculty regularly take such an account of "time spent" as was required for our questionnaire, so that they could have had nothing more than a general impression—not figures, certainly—upon which to base a comparison from which to derive the opinion asked for. And, as has already been pointed out, because of the poor statement of the question they are most often opinions on normality in general and not specifically normality of the working load. After all things are considered, and after canvassing the answers to this question very carefully, one is not left with the impression that the week was a notably exceptional one as to the amount of time spent in all professional activities.

C. THE FACTORS DETERMINING THE TEACHING LOAD IN A UNIVERSITY.

The factors investigated.—In giving thought to the problem of investigating the time consumed in connection with classroom instruction it may at once occur to the reader that this factor is itself determined by what may be designated as subfactors, and that, in framing a questionnaire which is planned to secure data bearing on the total time expenditure, this questionnaire should be so devised as to secure data from which the presence and influence of such subfactors may be analyzed. Such has been the effort in the present instance. The hypothetical subfactors. (which will hereafter be referred to as factors) whose possible influence the questionnaire and the study based upon the responses to it were designed to discover are the following:

(a) The department or *subject*. It is frequently contended by instructors that the subject taught is influential in determining one's teaching load. Horizontal column 1 on sheet 2 was introduced to assist in analyzing the effect of this factor.

(b) *Previous experience or inexperience with the work* is often alleged to be a factor; to teach courses new to the instructor, it is said, requires more time than to teach courses which one has already conducted. To make it possible to search out its influence, question 4 on sheet 2 was introduced.

(c) *Elementary or advanced character of the work*, i. e., in what year or years the course is normally taken. We are often told that courses taken by students who are freshmen or sophomores take less time than those taken by juniors and seniors, and that the latter again require less time than graduate courses. Question 5 (sheet 2) inquires into this.

(d) *Size of class*.—Horizontal column 6 calls for the enrollment during the semester, and is thus directed to find such influence as this factor may have.

(e) The influence of the *mode of presentation*, e. g., recitation, lecture, laboratory, etc., is sought for by answers to Nos. 7, 9, 11, 13, 15, 17, 19, and 21.

(f) The discovery of the effect of *repetition of courses in concurrent sections* is made possible by the requests (sheet 1, d) that "if the same preparation suffices for two or more sections of the same course, distribute the time in equal parts to each of the sections," and (e) to "make a report for each course or section for which you have teaching responsibility."

(g) Having the instructors' names and knowing their *rank* will help in evaluating the latter as a factor.

The unit of instruction used.—The unit of instruction used in the effort to analyze the influence of the hypothetical factors named is what is commonly known as the *clock hour*. This is particularly convenient because daily programs in higher institutions are usually planned in full clock-hour units or multiples of full clock hours.¹ For the purpose in hand the clock hour has distinct advantages over two other units that have sometimes been used or suggested, the *student hour*, defined by Buckingham² as “one student taught one hour a week for a semester,” and the *credit hour*, which is the “counter” used in totaling the credit received by the student. The student hour may be advocated for use in attacking the problem of educational finance in a higher institution. It may be that for this purpose, as suggested by Buckingham,² it is the best unit so far devised. Since we are here only concerned with the problem of the proper method of determining the teaching load, despite the fact that this teaching load may have important bearings upon the problem of cost, decision upon this point is not within the province of the present investigation. The reader has probably noted that the investigator is not leaving out of account the possible influence of the number of students (“size of class”) which the student hour is designed to recognize, but that it is merely one of a number of hypothetical factors to be investigated by means of the clock-hour unit. The use of the credit hour as the unit for investigation is at once seen to be inadequate when attention is called to the fact that its use would tend to make it impossible to analyze the influence of the mode of presentation (recitation, lecture, laboratory, etc.). As further justification for the use of this clock hour as the unit of investigation will be found in the facts themselves, there is little need here of defending it at greater length.

The particular procedure in using the clock hour as the unit in analyzing the influence of the several factors has been to charge up to each clock hour of instruction all work done in connection with it, both within and without the class period. This has been made possible by the organization of the second sheet of the questionnaire (see appendix). For instance, under rubric 7, the instructor was asked to report the hours of recitation in a course he was teaching and, under rubric 8, the amount of time spent in preparation for these hours of recitation. Each pair of succeeding rubrics to and including rubric 22 calls for a similar report on another mode of presentation. Rubric 23 asks for a report on the time spent in the

¹ Of course, a small portion of the hour—5 to 10 minutes—is allowed to students for moving from one classroom to another or from one building to another.

² Buckingham, B. R. *Critical Present-Day Issues in the Administration of State and Higher Education*. *School and Society*, 6 (Dec. 22, 1917): 722.

³ Loc. cit.

"correction of written and other work" in connection with the course, and rubric 24 for time spent "in other work for the courses listed not reported elsewhere." Thus, all time spent in connection with a course was reported. From these reports the total amount of work per clock hour of each mode of presentation for each course was computed. Usually it was a very simple matter to make such a computation and to distribute to each clock hour its proper portion of additional work reported under rubrics 23 and 24. Sometimes such distribution required the use of careful judgment, as in the cases where two or more modes of presentation were reported for a single course. In a few instances, where no safe judgment could be arrived at, the figures for a course were omitted in assembling the tables presented in this part of the report. Moreover, in assembling the tables no figures were introduced for clock hours of instruction for which the person reporting them was not responsible for all the work.¹ What prompted such exclusion was the aim to have the final figures representative of the clock hour of instruction when its full load was being carried by an instructor. From these amounts of work, in hours for each clock hour, the averages² of the numbers of hours of work per clock hour of instruction were readily computed and these are presented in the tables which follow. These averages are computed from the reports of 106 members of the faculty of the University of Washington—i. e., approximately 60 per cent of all teaching members. Altogether, 1,684 $\frac{1}{7}$ clock hours of instruction are involved.

¹ See direction (c) on sheet 1 of the questionnaire reproduced in the appendix.

² The average was used throughout this study because it is the measure of central tendency which is most influenced by extreme items in an array. It is believed that extremes should carry their full influence in an investigation of this nature.

TABLE 12.—Average number of hours of work per clock hour of instruction by mode of presentation and by subject and subject group.

Subject, department, or group.	Number of instructors reporting.	Recitation.		Lecture.		Mixed lecture and discussion.		Oral quiz.	
		Number of clock hours.	Average number of hours per clock hour.	Number of clock hours.	Average number of hours per clock hour.	Number of clock hours.	Average number of hours per clock hour.	Number of clock hours.	Average number of hours per clock hour.
<i>Foreign language</i>	23	263	1.77	15	4.72	27	2.75	7	1.96
Chinese.....	1	4	1.58						
French.....	7	74	1.49	10	3.32	5	4.48	2	3.50
German.....	6	66	1.91	1	3.83	10	2.38		
Greek.....	2	15	1.89			4	2.67	3	1.28
Italian.....	1	4	1.79						
Latin.....	3	32	1.83			3	2.19	2	1.50
Scandinavian.....	1	12	1.51	1	4.17	3	2.53		
Spanish.....	4	56	2.14	3	9.89	2	1.75		
English.....	7	36	1.79	5	1.25	19	2.22		
Mathematics.....	8	42	1.61	10	3.66	37	1.86	3	1.72
Social studies.....	5	7½	2.00	15	4.38	29½	2.63	8	1.13
Economics.....	2	7½	2.00	2	6.33	20½	2.40	3	1.00
History.....	1			9	5.08			5	1.30
Political science.....	1			4	1.83				
Sociology.....	1					9	3.14		
Philosophy and psychology.....	4	9	1.63	11	2.48	15	2.21	7	1.10
Oriental.....	1			10	1.57				
Education.....	4			6	1.94	39	2.66		
Science.....	16	21	2.21	58	2.53	35	2.08	18	1.94
Astronomy.....	1	4	2.81	5	2.70	1	1.25		
Bacteriology.....	1					5	1.77		
Botany.....	3	2	1.75	13	2.00	6	1.69		
Chemistry.....	3			16	2.69	2	2.75	8	1.44
Geology.....	2			2	4.00	19	2.16		
Physics.....	4	15	2.11	13	3.73	2	3.00	6	2.75
Zoology.....	2			9	2.74			4	1.73
Home economics.....	4	5	1.00	5	4.80	9	2.09		
Physical education.....	2	1	1.50	1	3.13				
Journalism.....	1			8	3.06				
Architecture.....	1			4	3.25			1½	1.00
Art.....	1	10	1.52						
Music.....	2	14	2.00	4	1.44	2	6.67		
Engineering.....	13	24	2.00	9½	1.99	27	2.20	2	2.11
Civil.....	5	13	1.83			10	3.29		
Electrical.....	3	2	1.58	½	1.50	12	1.80		
Mechanical.....	5	9	2.36	9	2.02	5	1.00	2	2.11
Forestry.....	3	5	1.13	2	3.75	6	1.50		
Mining.....	3	½	1.50	4½	1.72	8	3.77		
Pharmacy.....	2	8	1.74	4	2.21			1	1.00
Library economy.....	3	1	2.67	2	4.04	4	4.40		
Law.....	3	28	3.60						
Total.....	106	475	1.89	174	2.98	257½	2.41	47½	1.63

TABLE 12.—Average number of hours of work per clock hour of instruction by mode of presentation and by subject and subject group—Continued.

Subject, department, or group.	Scheduled conference.		Seminar.		Laboratory.		Shop.		Field.	
	Number of clock hours.	Average number of hours per clock hour.	Number of clock hours.	Average number of hours per clock hour.	Number of clock hours.	Average number of hours per clock hour.	Number of clock hours.	Average number of hours per clock hour.	Number of clock hours.	Average number of hours per clock hour.
<i>Foreign language</i>	6	1.17	4	2.40	.....	.....	.....	.....	.....	.....
German.....	.....	.....	2	3.25	.....	.....	.....	.....	.....	.....
Greek.....	5	1.10	.....	.....	.....	.....	.....	.....	.....	.....
Scandinavian.....	1	1.50	.....	.....	.....	.....	.....	.....	.....	.....
Spanish.....	.....	.....	2	1.54	.....	.....	.....	.....	.....	.....
<i>English</i>	45	1.14	11½	2.27	.....	.....	.....	.....	.....	.....
<i>Social studies</i>	4½	1.11	2	1.00	.....	.....	.....	.....	.....	.....
Economics.....	2½	1.00	.....	.....	.....	.....	.....	.....	.....	.....
Political science.....	.....	.....	2	1.00	.....	.....	.....	.....	.....	.....
Sociology.....	2	1.25	.....	.....	.....	.....	.....	.....	.....	.....
<i>Philosophy and psychology</i>.....	.....	.....	2	2.05	2	1.67	.....	.....	.....	.....
<i>Education</i>	2	1.00	6	2.64	.....	.....	.....	.....	.....	.....
<i>Science</i>	2	2.65	2	2.75	164	1.26	.....	.....	.....	.....
Astronomy.....	.....	.....	2	2.75	12	1.19	.....	.....	.....	.....
Botany.....	.....	.....	.....	.....	28	1.13	.....	.....	.....	.....
Chemistry.....	.....	.....	.....	.....	30	1.17	.....	.....	.....	.....
Geology.....	2	2.65	.....	.....	24	1.35	.....	.....	.....	.....
Physics.....	.....	.....	.....	.....	39	1.37	.....	.....	.....	.....
Zoology.....	.....	.....	.....	.....	31	1.30	.....	.....	.....	.....
<i>Home economics</i>	7	1.00	2	1.50	40	1.36	.....	.....	.....	.....
<i>Physical education</i>	7	1.27	.....	.....	23	1.16	.....	.....	.....	.....
<i>Architecture</i>.....	.....	.....	.....	.....	1	1.00	.....	.....	.....	.....
<i>Art</i>.....	.....	.....	.....	.....	10	1.18	.....	.....	.....	.....
<i>Engineering</i>	3	1.00	.....	.....	176½	1.17	60	1.30	.....	.....
Civil.....	.....	.....	.....	.....	95	1.25	.....	.....	.....	.....
Electrical.....	3	1.00	.....	.....	36½	1.20	.....	.....	.....	.....
Mechanical.....	.....	.....	.....	.....	45	0.98	60	1.30	.....	.....
<i>Forestry</i>.....	.....	.....	.....	.....	4	1.11	.....	.....	60	1.17
<i>Mining</i>	3	1.00	.....	.....	46	1.07	3	1.00	.....	.....
<i>Pharmacy</i>.....	.....	.....	.....	.....	12	1.19	.....	.....	.....	.....
<i>Library economy</i>.....	.....	.....	.....	.....	14	1.33	.....	.....	.....	.....
<i>Law</i>.....	.....	.....	.....	.....	6	2.26	.....	.....	.....	.....
Total.....	79½	1.18	29½	2.24	498½	1.23	63	1.28	60	1.17

1. *The mode of presentation as a factor.*—The influence of the mode of presentation as a factor may be seen at a glance by reference to Table 12, which presents in the lowest horizontal column the total number of clock hours of each mode of presentation (recitation, lecture, mixed lecture and discussion, etc.) and the average number of hours of work both in classroom and out per clock hour of such instruction. Striking differences between the several modes of presentation are at once manifest. While the average number of hours of work per clock hour of instruction for recitation is 1.89, for a clock hour of lecture it is approximately an hour greater. In fact, lecture is seen to be the most arduous of the modes of presentation. Mixed lecture and discussion is almost midway between recitation and lecture. Oral quiz requires a somewhat smaller time expenditure per clock hour than does recitation. The time investment in scheduled conference seems to be almost limited to the clock hour of conference itself; i. e., there is an expenditure of but 0.18 of an hour in

addition to the clock hour of instruction. Seminars on an average require the expenditure of 2.24 hours of work per clock hour, ranging between recitation and lecture. Laboratory, shop, and field require about the same time investment as scheduled conference hours. We have in these figures support for some of the distinctions that have for many years been made in our rule of thumb methods of determining the teaching hours of instructors in higher institutions. But the question may well be raised as to whether, in the light of these facts, the systems of weighting in use have been just to all concerned, and whether they have recognized all of the important differences that are here discovered.

2. *The subject or subject group as a factor.*—Table 12 reveals also the influence of the subject or subject group as a factor. This may be seen by glancing down, e. g., the vertical column headed "Recitation." A clock hour of recitation in foreign language is seen to require an average of 1.77 hours of work. The same is essentially true of English. A clock hour of recitation in mathematics requires slightly less time. The numbers of clock hours of recitation upon which the averages for the social studies and for philosophy and psychology are based, are probably too small to furnish valid comparisons. The departments of oriental literature and education report no recitation work. One or the other of the two reasons just given must exclude from comparison as to this mode of presentation the following subjects: Home economics, physical education, journalism, architecture, forestry, mining, pharmacy, and library economy. A clock hour of recitation in the sciences is seen to require more hours of work than any of those so far considered. Art requires less time than any of the groups, music and engineering slightly less than the sciences, and law emphatically more—in fact, almost twice the average for all subjects.

The reader will find it profitable to glance down each of the remaining vertical columns of this table in the same manner as has just been demonstrated for the recitation column, noting differences in the average number of hours of work for each of the subjects. In doing so it is probably safest to give little heed to differences where the number of clock hours used in computation has been less than 10, as such small numbers of hours are more likely to give unrepresentative averages than are larger numbers. The columns reporting the facts for oral quiz, scheduled conference, seminar, shop, and field contain but a small proportion of instances of subjects where 10 or more clock hours are reported, and will therefore reveal less as to the influence of the subject in determining the teaching load than do the remaining columns of the table. But even these

contain some facts of significance, which, with those of the other columns, point to the advisability of giving the subject or subject group recognition as a real factor in determining the teaching load.

TABLE 13.—Average number of hours of work per clock hour of instruction by mode of presentation and by the division in which the work is normally taken.

Mode of presentation.	Lower division.		Upper division.		Graduate division.	
	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.
Recitation.....	305½	1.74	103½	2.13	19	2.90
Lecture.....	58	2.82	47½	3.03	13	3.84
Mixed lecture and discussion.....	65½	1.84	107	2.48	11	3.60
Oral quiz.....	27½	1.64	4	1.83	2	3.50
Scheduled conference.....	32½	1.07	12	1.28	6	1.08
Seminar.....					21½	2.75
Laboratory.....	188	1.26	198½	1.17	11	1.35
Shop.....	63	1.28				
Field.....			12	1.17		

3. The elementary or advanced character of the work as a factor.—

Table 13 presents the results of an effort to analyze the influence of the elementary or advanced character of the work as a factor. Reference to sheet 2 of the questionnaire used in the investigation will show that the "year or years in which the course is normally taken" were called for. The instructor was directed to designate (see No. 5 and footnote on sheet 2 of the questionnaire) the year or years by number, e. g., "1 for freshmen, 2 for sophomores, 5 for graduate courses and professional courses requiring four years of previous training, etc." As some courses drew their students normally from more than one class, the answers of the instructors were given in combinations of numbers, as 1-2, 2-3, 1-4, or 3-5. Under "Lower division" in Table 13 have been included courses reported as 1, 2, or 1-2; under "Upper division," 3, 4, and 3-4; under "Graduate," 5 and 5-6. In assembling the materials for this table courses reported with other numbers, e. g., 2-3, 1-4, 3-5, 4-5, etc., were excluded. The figures for somewhat less than 300 of the total of 1,684 seven-twelfths clock hours of instruction included in the present study were omitted from this table. That is to say, the figures for slightly more than 1,300 clock hours of instruction have been introduced into the effort to discover the influence of the factor under consideration.

For the recitation mode of presentation, the average number of hours of work per clock hour of instruction in the lower division is

1.74; in the upper division, 2.13; in the graduate courses, 2.99. We note at once in the figures for this mode of presentation a definite progression in the amount of work required per clock hour of instruction as we proceed from courses in the lower division to those of graduate caliber. This is also true for the three succeeding modes of presentation in the table, lecture, mixed lecture and discussion, and oral quiz, although the numbers of clock hours involved in the computation of the average number of hours of work in the mode last named in the columns for upper-division and graduate work are so few as to justify little confidence in the findings as to this mode of presentation in advanced work. As the mode last named seems to be seldom used in upper-division and graduate work, this weakness is a matter of but slight concern. Scheduled conference, while requiring practically no time outside the clock hour of instruction itself in the lower division, requires approximately one-fourth of an hour of such additional time in the upper division. For this mode in graduate work we are again confronted by a number of clock hours too small to give confidence in the average number of hours of work computed and introduced in the table. As the seminar mode of presentation is almost exclusively used in graduate classes, no opportunity or need appears for comparison with upper or lower division figures for this mode. The laboratory mode of presentation does not seem to require more work per clock hour of instruction in the upper division than in the lower division, as do most of the preceding modes. As the averages in this mode for the lower and upper divisions have been computed from almost 200 clock hours of instruction each, this finding is well established. Laboratory work of graduate caliber seems to require slightly more time than that of undergraduate grade. The figures for shop and field work are so near those for laboratory work that they hardly merit separate attention and, as far as the influence of the factors under consideration is concerned, may be similarly recognized in fixing the teaching load of members of the instructional staff. Thus, the evidence of the influence of this factor of the elementary or advanced character of the work is clear; injustice would result from an apportionment of clock hours of instruction to members of a department staff without regard to it.

TABLE 14.—*Number of hours of work per clock hour of instruction by mode of presentation and by the instructors' previous experience or inexperience with the course.*

Mode of presentation.	First-time work.		Non first-time work.		All work.	
	Number of clock hours of instruction.	Average number of hours of work per clock-hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock-hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock-hour of instruction.
Recitation.....	83½	2.07	389½	1.86	473	1.86
Lecture.....	36½	4.48	137½	2.58	174	2.98
Mixed lecture and discussion.....	36½	3.07	221	2.30	257½	2.41
Oral quiz.....	4	1.65	43½	1.62	47½	1.62
Scheduled conference.....	5½	1.00	74	1.18	79½	1.18
Seminar.....	6	3.21	23½	1.99	29½	2.24
Laboratory.....	35½	1.33	462½	1.22	498½	1.23
Shop.....			63	1.28	63	1.28
Field.....			60	1.17	60	1.17

4. *Previous experience or inexperience with the course as a factor.*—That the instructor's previous experience or inexperience with the work of a course is a real factor in determining his actual teaching load may be seen by a brief examination of the figures assembled in Table 14. This table presents the average number of hours of work per clock hour of instruction when the work is classified as to "first-time" and "nonfirst-time" work, classes corresponding to the two kinds of answers that were made to question 4 on the second sheet of the questionnaire reading as follows: "Is this the first time you have taught the course?" Work "new" to the instructor requires more time per clock hour than does work that he has previously taught. This is true for all modes of presentation for which we have figures that allow a comparison except scheduled conference. For this mode and for oral quiz the small numbers of "first-time" clock hours of instruction forbid assurance for conclusions that may be drawn. The ratios that the "first-time" averages bear to the "nonfirst-time" averages are not the same for all modes of presentation, as may be seen from the following: For recitation this ratio is 1.11:1.00; for lecture, 1.73:1.00; for mixed lecture and discussion, 1.33:1.00; for seminar, 1.61:1.00; for laboratory, 1.09:1.00. For the recitation and laboratory modes of presentation the difference seems to be less marked than for lecture, mixed lecture and discussion, and seminar.

5. *The rank of the instructor as a factor.*—Table 15 presents the average number of hours of work per clock hour of instruction by rank of instructors—i. e., the average number of hours of work per clock hour for instructors, for assistant professors, for associate professors, and for full professors. An examination of these averages will

fail to discover any consistent influence of rank upon the time consumed in carrying the work. For recitation the average drops from instructor to assistant professor and again to associate professor, but rises again to its highest point for the full professor. For lecture there is no evidence of such influence, as the averages are higher for instructor and associate professor than for assistant professor and professor. For mixed lecture and discussion the averages are practically equal for all ranks. For none of the remaining modes of presentation for which comparisons are possible does any consistent influence of rank make its appearance. Such differences as are evident must either be purely casual or due to factors other than that of the rank of the instructor—more probably the latter.

TABLE 15.—Average number of hours of work per clock-hour of instruction by mode of presentation and by the rank of the instructor.

Mode of presentation.	Instructor s.		Assistant professors.		Associate professors.		Professors.		All work.	
	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.
Recitation.....	158½	1.92	138½	1.78	54	1.66	124	2.27	475	1.88
Lecture.....	38½	2.95	36½	2.85	25	3.72	74	2.28	174	2.38
Mixed lecture and discussion.....	86½	2.37	85	2.36	37	2.50	71	2.40	257½	2.41
Oral quiz.....	21	1.52	13½	1.57	.....	.....	13	1.84	47½	1.62
Scheduled conference.....	13½	1.00	43	1.37	.....	.....	23	1.13	79½	1.18
Seminar.....	.....	.....	9	2.82	6	2.82	14½	1.64	29½	2.24
Laboratory.....	179½	1.26	187	1.23	73	1.09	58½	1.29	465½	1.28
Shop.....	60	1.30	8	1.00	.....	.....	.....	60	60	1.28
Field.....	.....	.....	60	1.17	.....	.....	.....	.....	60	1.17

6. *Repetition in concurrent sections as a factor.*—Table 16 was assembled for the purpose of investigating the influence of repetition of courses in parallel sections upon the instructor's teaching load. Repetition here means repetition in concurrent sections by the *same* instructor, not by different instructors. In the columns headed "Repeated" are set down the averages of the numbers of hours of work done in connection with a clock hour of instruction in such repeated sections, and in the columns headed "Nonrepeated" the averages of the numbers of hours of work done in connection with a clock hour of instruction of courses or work not being presented by the instructor in such parallel sections. In the computation of these averages no figures for work in subject groups containing no repeated sections were used, as it was believed that these might improperly affect the

results. To avoid undue influence of the factor already designated as the "elementary or advanced character of the work," the comparisons are made by the divisions in which the work is found, as "Lower division" and "Upper division," but the averages for the totals of these two divisions have also been introduced ("Both lower and upper division"). Because of the frequent statement in college and university circles to the effect that repetition tends to lighten the teaching load, one is not a little surprised that these figures disclose no consistently appearing or notable differences between the averages for repeated and nonrepeated work. In fact, the differences found are more frequently in favor of the nonrepeated than of the repeated work. Only in the lecture and mixed lecture and discussion modes of upper-division work do we find the anticipated difference. In the former instance, while large, we can have but little confidence in the difference, because only 6 clock hours were involved in the computation of the average for repeated work. In the latter case the difference is only 0.2 of an hour. Partial explanation of this absence of a marked difference in favor of repeated work may be found in the policy in this institution—common to many higher institutions—of avoiding much repetition of the sort under consideration in the assignment of courses. It is to be noted that even in the lower division there is a relatively small proportion of repeated work. Examination of the original questionnaires shows that such repetition as appears is usually two-section repetition, three-section and four-section repetition being very infrequently reported. Furthermore, the numbers of hours of work per clock hour of instruction include *all* work done in connection with a course, comprehending the reading of papers as well as preparation. While time spent in preparation per clock hour of instruction may be reduced by repetition, this would not be true of the reading of papers. On the basis of the findings of the present investigation, there seems to be no justification, with conditions similar to those obtaining at the time the data were gathered, for admitting repetition as a significant factor in fixing teaching loads for members of the faculty of a university.

TABLE 16.—Average number of hours of work per clock hour of instruction by mode of presentation and by repetition or nonrepetition of the work.

Mode of presentation.	Lower division.				Upper division.				Both lower and upper division.			
	Repeated.		Non-repeated.		Repeated.		Non-repeated.		Repeated.		Non-repeated.	
	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.
Recitation.....	70½	2.58	224	1.72	12	3.00	82	2.04	82½	2.01	286	1.79
Lecture.....	14	3.17	33	2.62	6	1.94	30	3.31	20	2.80	63	2.95
Mixed lecture and discussion.....	19½	2.06	36	1.72	16	2.22	81	2.42	35½	2.13	117	2.20
Oral quiz.....	12½	1.88	7	1.37								
Laboratory.....	78	1.26	97	1.26	41½	1.19	92	1.16	119½	1.24	199	1.21

7. *Size of class as a factor.*—The last of the hypothetical factors in the determination of the teaching load whose influence this study was aimed to discover is the size of the class. Before turning our attention to the averages presented in Table 17, which essays an analysis for this factor, it is advisable to point out the weaknesses of the data from which they have been computed. Question 6 of sheet 2 of the blank inquiry (see appendix) calls for the enrollment of each class and section during the semester. Under fully normal conditions as to class enrollments, the answers to this question would have served adequately the purpose under consideration. At the time the investigation was originally projected this would have been true; but, owing to the large exodus of students that took place during the spring of 1917 in response to the war emergency and before the questionnaire was sent out to the members of the faculty for those classes enrolling large proportions of male students especially, the enrollment during the semester would not in many cases correspond to the numbers in the same classes during the school week of May 14-19 upon which instructors were asked to report. The incidence of the withdrawals from all courses and classes obviously can not be assumed to be proportionate to the enrollment for the semester. There is evidence that a few advanced classes were discontinued because of a loss of all students, while there were other classes that suffered the loss of not a single student. We have here, therefore, a source of weakness that must cast a large measure of doubt upon the dependability of findings that concern the average number of hours of work per clock hour of instruction as influenced

by size of class. Another source of weakness is found in the fact that, while there were a number of large classes, they were not sufficiently numerous to make possible satisfactory comparisons for the purpose in hand. In the first effort at this analysis the classifications of size of class used were 1-14, 15-29, 30-44, 45-59, 60-74, etc., advancing by 15 students for each larger classification. While there were usually fairly large numbers of clock hours of instruction in each of the first three groups, the distribution in many of the upper groups was so attenuated as to make comparisons both impossible and impracticable.

TABLE 17.—Average number of hours of work per clock hour of instruction by mode of presentation and by size of class.

Mode of presentation.	Lower division.				Upper division.				Both lower and upper division.			
	Less than 30 in class.		30 or more in class.		Less than 30 in class.		30 or more in class.		Less than 30 in class.		30 or more in class.	
	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.	Number of clock hours of instruction.	Average number of hours of work per clock hour of instruction.
Recitation.....	227	1.76	59½	1.88	91½	1.86	14	3.12	318½	1.79	73½	2.12
Lecture.....	31	2.58	27	2.76	39½	2.96	10	2.78	70½	2.79	37	2.77
Mixed lecture and discussion.....	49	1.69	13½	2.98	69	2.25	34	2.52	118	2.02	47½	2.64

To be able to make any use of the data for the purposes of studying the influence of size of class it was necessary to retabulate them in two groups only—viz, for classes (*a*) of less than 30 and (*b*) of 30 or more. The results of this effort are presented in Table 17, which sets forth the averages by the division in which a course is taught and by mode of presentation. Figures for the graduate division are omitted, as there are few strictly graduate classes enrolling 30 or more students. Averages for the recitation, lecture, and mixed lecture and discussion modes only are included in the table because there were too few or no clock hours of instruction in the remaining modes on which to compute averages. For example, very few laboratory sections enroll 30 or more students.

Notwithstanding the weakness just indicated, large class enrollments are seen in Table 17 to add appreciably to the average amount of time spent in connection with a clock hour of instruction. This is shown in the averages for lower-division and upper-division work for the recitation and mixed lecture and discussion modes of pre-

sentation and in lower-division work for the lecture mode. In this table, where there are large numbers of clock hours of instruction involved, the differences between the averages are not very large. This is the case for the averages for recitation and lecture in the lower division, and mixed lecture and discussion in the upper division. The large differences are found in two of the three instances in which small numbers of clock hours of instruction have been used in the computation of the averages, viz, in mixed lecture and discussion in the lower division and in recitation in the upper division. The difference in favor of classes of 30 or more in upper-division lecture must also be explained by the small number of clock hours of lecture used in computing the average. (The column headed "Both lower and upper division," containing, as it does, the figures for all the work in both divisions, the averages for each of which are reported in the preceding columns of this table, is given no special attention in our discussion because the averages it contains must obviously be influenced by the factor we have called "the elementary or advanced character of the work.")

We may sum up the discussion of our investigation of the effect of size of class upon the teaching load by saying that it is a factor, but that, on account of the uncertainty of our figures on the size of classes at the time the investigation was made and the attenuation of the distribution of classes when grouped by size, no recommendation can be made as to how much recognition is to be given for large classes in fixing the teaching load of an instructor. It is the writer's opinion that the difference due to size of class is largely attributable to the difference in time spent in reading papers and correcting work handed in by students. If this is true, an appropriate recognition for large classes might be made after the making of a small supplementary investigation into time spent in reading and correcting papers in classes of different sizes.

D. A METHOD OF ADJUSTING THE TEACHING LOAD IN A UNIVERSITY.

In preceding sections of this study we have presented the facts as to the total time spent in all professional activities by members of a university faculty and the proportional distribution of this total time to teaching work, and to such noninstructional activities as personal research, other official duties for the university, and professional activities not otherwise reported. We have also analyzed out the influence on the clock hour of instruction of certain factors determining the teaching load of a member of the faculty. Our next task must be the application of the findings in these preceding portions of the investigation in a method of adjusting the teaching load that will

assure the university an approximately uniform amount of service by all members of its faculty and at the same time be just to them by not requiring much more service of some instructors than is required of others.

Computing the weighted values of clock hours of instruction.—The first step taken in the application of the findings of this investigation in a method of adjusting the teaching load was the computation of a set of weighted values of clock hours of instruction—i. e., values into which has been introduced the influence of the several factors that have been found to affect the "total time consumed" in connection with a clock hour of instruction. These weighted values are presented in Tables 18–22. As will be seen in the following description of the procedure in computation, the only factor found to be notably influential which has been omitted is what we have termed the size of class. The reason for omitting it may be inferred from what has been said on page 44.

The detailed procedure in the computation of the weighted values of Tables 18–22 may be illustrated by describing how they were arrived at for foreign language, the first of the subject groups listed in Table 18. It may be seen from Table 12 that a total of 263 clock hours of the recitation mode of instruction were reported by the teachers of foreign language, and that the average number of hours of work per clock hour of instruction was 1.77. Before it was possible to compute, e. g., the average number of hours of work for a clock hour of recitation in foreign language in the lower division, it was necessary to know the average year place of these 263 clock hours of recitation. This was found in the following manner:

Average year place of clock hours of recitation.

(a)	(b)	(c)	(d)
Year or years normally taken.	Year place assigned.	Number of clock hours.	Product of (b) and (c).
1	1	87	87
2	2	54	108
3	3	22	66
4	4	6	24
5	5	12	60
1-2	1½	43	64½
2-3	2½	7	17½
3-4	3½	20	70
1-3	2	2	4
2-4	3	4	12
3-5	4	3	12
1-4	2½	3	7½
		263	532½

Average year place, 2.02.

In this illustration, the "year place assigned" is taken from the "year or years normally taken." For clock hours reported for years 1-2, this year place assigned is midway between 1 and 2 or $1\frac{1}{2}$. Year place has been assigned by a similar method for clock hours reported for years 2-3, 3-4, 1-3, 2-4, 3-5, and 1-4. The average year place, obtained by dividing the total at the foot of column (d) by the total number of clock hours at the foot of column (c), is 2.02—for practical purposes, 2. That is to say, the average number of hours of work per clock hour of recitation in foreign language, 1.77, may be assumed to be the average for work normally taken by the student in his sophomore year. To compute the number of hours of work per clock hour of recitation in foreign language for the lower division for Table 18, we may proceed by the following proportion: $a_1 : a_2 = b : x$, where a_1 is the number of hours of work per clock hour of recitation for second-year courses for all subjects, a_2 is the number of hours of work per clock hour of recitation for second-year courses in foreign language, b is the number of hours of work per clock hour of recitation in the lower division for all subjects, and x is the number of hours of work per clock hour of recitation in the lower division in foreign language. The second term in our proportion is seen from our recent computation to be 1.77. The third term is seen in Table 10 to be 1.74. The first term is still needed for the computation of x , and this may be derived from the figures in Table 13 by the following procedure: Lower-division recitation for all subjects having a year place of $1\frac{1}{2}$ ¹—midway between 1 and 2—requires, as has just been pointed out, an average time expenditure of 1.74 hours. Upper-division recitation for all subjects from the same table having a year place of $3\frac{1}{2}$ —midway between 3 and 4—requires an average time expenditure of 2.13 hours. Second-year work, being one-half year in advance of the year place of lower-division work and $1\frac{1}{2}$ years below upper-division work, should require on the average, in addition to the number of hours per clock hour of lower-division recitation, one-fourth of the difference in time between that required for upper and lower division recitation—i. e., 1.74 plus $\frac{1}{4}$ ($2.13-1.74$), or 1.84. Introducing this as a_1 into our proportion, we have—

$$1.84 : 1.77 = 1.74 : x$$

$$1.84 x = 3.08$$

$$x = 1.67$$

This value of x , the number of hours of work per clock hour of recitation in foreign language in the lower division, is to be found under the column headed "All work" in Table 18.

¹ Actual computation of the average year place of recitation work in the lower division that has entered into the computation of the average number of hours reported in Table 13 finds it to be so near $1\frac{1}{2}$ that, for all practical purposes, this figure may be safely used. The same is true for the other modes of presentation, as well as for the average year place of $3\frac{1}{2}$ for upper-division work.

The method of recognizing in the weighted values the influences of the factor previous experience or inexperience with the work needs still to be presented. We have in Table 14 figures to indicate that the ratio of the average number of hours of work per clock hour of recitation for all work to the average number of hours of work per clock hour of recitation for first-time work is 1.89:2.07. Assuming that this relationship remains constant irrespective of the division—upper, lower, or graduate—in which the work is found, we resort again to a proportional equation, $c_1:c_2=d:x$, in which c_1 is the average number of hours of work per clock hour of recitation for all work, c_2 is the number of hours of work per clock hour of recitation for all first-time work, d is the average number of hours of work per clock hour of lower-division recitation, and x is the number of hours of work per clock hour of recitation for lower-division first-time work. We have—

$$1.89:2.07=1.74:x$$

$$1.89\ x=3.60$$

$$x=1.91$$

This weighted value for first-time lower-division work will be found at the foot of Table 18. By means of a similar proportional equation we find the weighted value of nonfirst-time recitation in the lower division to be 1.71.

TABLE 18.—Weighted values for clock hours of recitation.

Subject or group.	Lower division.			Upper division.			Graduate.		
	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.
Foreign language.....	1.83	1.64	1.67	2.24	2.02	2.05	3.15	2.83	2.88
English.....	1.96	1.76	1.79	2.40	2.16	2.19	3.37	3.03	3.06
Mathematics.....	1.77	1.58	1.61	2.15	1.94	1.97	3.03	2.72	2.77
Social studies.....	2.17	1.94	1.98	2.64	2.38	2.41	3.71	3.33	3.39
Philosophy and psychology ¹	1.75	1.56	1.59	2.12	1.91	1.94	2.99	2.68	2.73
Science.....	2.16	1.94	1.97	2.61	2.36	2.39	3.66	3.29	3.35
Home economics.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99
Physical education.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99
Journalism.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99
Architecture.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99
Art.....	1.64	1.46	1.49	2.00	1.80	1.83	2.81	2.53	2.57
Music.....	2.19	1.97	2.00	2.68	2.42	2.45	3.76	3.38	3.44
Engineering.....	1.96	1.76	1.79	2.40	2.16	2.19	3.37	3.03	3.06
Forestry.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99
Mining.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99
Pharmacy.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99
Library economy.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99
Law.....	3.19	2.89	2.94	3.94	3.55	3.60	5.52	4.97	5.06
All.....	1.91	1.71	1.74	2.33	2.10	2.13	3.27	2.94	2.99

¹ See p. 40.

TABLE 19.—*Weighted values for clock hours of lecture.*

Subject or group.	Lower division.			Upper division.			Graduate work.		
	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.
Foreign language.....	6.37	3.67	4.24	6.85	3.93	4.55	8.67	4.99	5.77
English ¹	3.89	2.24	2.59	4.20	2.41	2.79	5.29	3.04	3.52
Mathematics.....	5.12	2.95	3.41	5.52	3.17	3.67	6.99	4.02	4.65
Social studies.....	6.37	3.67	4.24	6.85	3.94	4.56	8.68	4.99	5.78
Philosophy and psychology.....	3.53	2.03	2.35	3.79	2.18	2.52	4.80	2.76	3.20
Oriental.....	2.19	1.26	1.46	2.38	1.36	1.57	2.99	1.72	1.99
Education ¹	4.65	2.68	3.10	5.03	2.89	3.34	6.34	3.65	4.22
Science.....	3.63	2.09	2.42	3.91	2.25	2.60	4.94	2.84	3.29
Home economics.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84
Physical education.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84
Journalism.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84
Architecture.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84
Art ¹	3.62	2.09	2.41	3.91	2.25	2.60	4.97	2.85	3.30
Music ¹	4.87	2.80	3.24	5.24	3.01	3.48	6.64	3.87	4.42
Engineering ¹	4.25	2.45	2.83	4.58	2.66	3.04	5.79	3.33	3.85
Forestry.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84
Mining.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84
Pharmacy.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84
Library economy.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84
All.....	4.24	2.44	2.82	4.56	2.62	3.03	5.77	3.32	3.84

¹ See p. 49.TABLE 20.—*Weighted values for clock hours of mixed lecture and discussion.*

Subject or group.	Lower division.			Upper division.			Graduate.		
	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.
Foreign language.....	2.44	1.84	1.92	3.30	2.48	2.59	4.86	3.63	3.81
English.....	2.15	1.62	1.69	2.91	2.18	2.28	4.26	3.18	3.34
Mathematics.....	2.01	1.51	1.58	2.73	2.05	2.14	3.99	2.98	3.13
Social studies.....	2.66	2.00	2.09	3.58	2.69	2.81	5.26	3.94	4.13
Philosophy and psychology.....	2.14	1.61	1.68	2.88	2.16	2.26	4.23	3.17	3.32
Education.....	2.57	1.93	2.02	3.48	2.61	2.73	5.10	3.81	4.00
Science.....	2.31	1.74	1.82	3.13	2.36	2.46	4.60	3.31	3.61
Home economics.....	2.34	1.78	1.84	3.16	2.37	2.48	4.64	3.47	3.64
Physical education.....	2.34	1.78	1.84	3.16	2.37	2.48	4.64	3.47	3.64
Journalism.....	2.34	1.78	1.84	3.16	2.37	2.48	4.64	3.47	3.64
Architecture.....	2.34	1.78	1.84	3.16	2.37	2.48	4.64	3.47	3.64
Art ¹	2.01	1.51	1.58	2.71	2.04	2.13	3.99	2.98	3.13
Music ¹	2.68	2.02	2.11	3.63	2.72	2.85	5.34	3.99	4.19
Engineering.....	2.35	1.77	1.85	3.17	2.38	2.49	4.65	3.48	3.65
Forestry.....	2.34	1.78	1.84	3.16	2.37	2.48	4.64	3.47	3.64
Mining.....	2.34	1.78	1.84	3.16	2.37	2.48	4.64	3.47	3.64
Pharmacy.....	2.34	1.78	1.84	3.16	2.37	2.48	4.64	3.47	3.64
Library economy.....	2.34	1.78	1.84	3.16	2.37	2.48	4.64	3.47	3.64
All.....	2.34	1.76	1.84	3.16	2.37	2.48	4.64	3.47	3.64

¹ See p. 49.

TABLE 21.—*Weighted values of clock hours of oral quiz, of scheduled conference, and of seminar.*

Subject or group.	Lower division.			Upper division.			Graduate.		
	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.
ORAL QUIZ.									
Science.....	1.98	1.94	1.94	2.20	2.16	2.16	.....	.....	.....
All subjects.....	1.67	1.64	1.64	1.86	1.83	1.83	.....	.....	.....
SCHEDULED CONFERENCE.									
English.....	.....	1.11	1.11	.....	1.83	1.33	.....	1.11	1.11
All subjects.....	.....	1.07	1.07	.....	1.28	1.28	.....	1.06	1.06
SEMINAR.									
All subjects.....	.....	.....	.....	.....	.....	.....	3.21	1.99	2.24

TABLE 22.—*Weighted values of clock hours of laboratory, shop, and field.*

Subject or group.	Lower division.			Upper division.			Graduate.		
	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.	First-time work.	Non-first-time work.	All work.
LABORATORY.									
Philosophy and psychology..	1.36	1.35	1.35	1.27	1.16	1.17	1.48	1.34	1.35
Science.....	1.39	1.26	1.29	1.30	1.19	1.20	1.49	1.37	1.38
Home economics.....	1.54	1.42	1.43	1.44	1.32	1.33	1.65	1.52	1.53
Physical education.....	1.27	1.17	1.18	1.18	1.08	1.09	.....	.....	.....
Architecture.....	1.36	1.25	1.26	1.27	1.16	1.17	1.48	1.34	1.35
Art.....	1.28	1.18	1.19	1.19	1.09	1.10	1.37	1.26	1.27
Engineering.....	1.32	1.21	1.23	1.25	1.14	1.15	1.43	1.31	1.32
Forestry.....	1.36	1.25	1.26	1.27	1.16	1.17	1.48	1.34	1.35
Mining.....	1.18	1.08	1.09	1.10	1.00	1.01	1.25	1.15	1.16
Pharmacy.....	1.36	1.25	1.26	1.27	1.16	1.17	1.48	1.34	1.35
Library economy.....	.....	.....	.....	1.38	1.26	1.27	1.53	1.45	1.46
Law ¹.....	.....	.....	.....	2.26	2.06	2.08	2.60	2.38	2.40
All subjects.....	1.36	1.25	1.26	1.27	1.16	1.17	1.46	1.34	1.35
SHOP.									
Engineering and mining.....	.....	1.28	.....	.....	.....	.....	.....	.....	.....
FIELD.									
Forestry.....	.....	.....	.....	.....	1.17	.....	.....	.....	.....

¹ Computed from six hours of moot court.

We are now ready to compute the weighted values in foreign language for first-time and nonfirst time recitation in the lower division as required for complete illustration. For the first-time work we have the proportional equation $e_1:e_2=f:w$, in which e_1 is the number of hours of work per clock hour of recitation for all subjects in lower-division, e_2 is the number of hours of work for all subjects per clock hour of recitation for first-time work in lower-

division, f is the number of hours of work per clock hour of recitation in foreign language in the lower division, and x is the number of hours of work per clock hour of first-time recitation in foreign language in the lower division. Substituting the known values, we have—

$$1.74:1.91=1.67:x$$

$$1.74x=3.19$$

$$x=1.83.$$

By means of a similar proportional equation we obtain the weighted value 1.64 for nonfirst time work in foreign language in the lower division.

With exceptions to be noted, the procedure just described has been used in computing all weighted values appearing in these tables. Table 12 shows that for some subjects or subject groups the numbers of clock hours of some of the modes of presentation are so small as to make a weighted value based on their averages a relatively undependable figure. For instance, for the group of social studies only $7\frac{1}{2}$ clock hours of recitation are reported. To compute a weighted value with the average number of hours of work per clock hour of recitation for this subject group as a foundation would be unsafe. So, in this case the weighted value for recitation was obtained by the solution of a proportional equation introducing the weighted value of a clock hour of the most common mode of presentation reported for this group, viz, mixed lecture and discussion. The proportional equation used here was $c:d=w:x$ in which c is the average number of hours of work per clock hour of mixed lecture and discussion for all subjects in the lower division, d is the average number of hours of work per clock hour of recitation in all subjects in the lower division (for c and d see Table 13), w is the weighted value of a clock hour of mixed lecture and discussion in the social studies in the lower division (see Table 20), and x is the weighted value of a clock hour of recitation in the social studies in the lower division. Substituting the known values, we have—

$$1.84:1.74=2.09:x$$

$$1.84x=3.64$$

$$x=1.98.$$

This value of x is introduced in its proper place in Table 18 and from it the two remaining weighted values for lower-division work also to be found in this table have been computed in a manner previously described. The method of calculation of the weighted values for the social studies in the upper and graduate divisions may be inferred from the preceding. This method of obtaining weighted

values has been used whenever the number of clock hours of the mode of presentation has been less than 10, and when, at the same time, the subject or subject group is represented in Table 12 by 10 or more clock hours of some other mode of presentation. This minimum was rather arbitrarily chosen after a number of trial computations of averages had been made, and is considered large enough to eliminate the worst of the variation due to a small representation of a subject or group in a mode of presentation. Resort to this method is signified by the use of the superscript ⁽¹⁾ immediately following the name of the subject or subject group.

In instances of subjects or subject groups which are represented in none of the three modes of recitation, lecture, or mixed lecture, and discussion by as many as 10 or more clock hours, it has been necessary to introduce in Tables 18-20 the weighted values found for all subjects, which are shown in the lowest horizontal columns of each of the tables of weighted values. This is not the method to be desired, but seems to be the only recourse in the circumstances. Such introduction is indicated by the use of italics.

It was stated at the beginning of the description of the method of compilation of the tables of weighted values that they are designed to recognize all factors found to be notably influential in determining the teaching load per clock hour of instruction except size of class. (a) The mode of presentation as a factor is recognized by having each of the tables give the weighted values for different modes, as recitation, lecture, mixed lecture and discussion, oral quiz, scheduled conference, seminar, laboratory, shop, and field.

(b) The subject or subject group as a factor is recognized by having the weighted values entered by subject or subject groups listed in the left-hand columns of the tables. In instances where certain modes of presentation are not reported for certain subjects or subject-groups, or where the work infrequently classifies under a mode, these subjects or subject groups are omitted from the table. For these reasons, e. g., education and oriental are omitted from Table 18. Law is omitted from Table 19, not because the lecture mode of presentation is not used in this subject, but because a combination of modes is used which the instructors of that subject designate as recitation. Tables 18, 19, and 20 are more nearly complete in the recognition of subject differences than are the succeeding tables. Table 21, giving weighted values for oral quiz, because of the small number of clock hours of this mode reported for most subjects, presents weighted values for the science group and "All subjects"; it also contains weighted values for scheduled conference, and recognizes only English and "All subjects"; containing weighted values for seminar, it gives no subject distinctions. Table 22, presenting

weighted values for laboratory, shop, and field, recognizes all subjects for which these modes of presentation were reported.

(c) The influence of the elementary or advanced character of the work as a factor is recognized in the tables in presenting the weighted values by lower, upper, and graduate divisions. In Tables 18, 19, and 20 a complete set of weighted values has been computed for all three divisions. As the oral-quiz mode seems not to be used in the graduate division, Table 21 contains no weighted values for that division. As the seminar mode is used almost exclusively in graduate classes, it does not seem necessary to compute weighted values for the mode in the lower and upper divisions. Weighted values for laboratory have been omitted from the lower division in library economy and law and from the graduate division in physical education, as there was no laboratory work of these divisions reported in these subjects. Similar explanations will account for the omissions of figures for two of the three divisions from Table 22.

(d) Previous experience or inexperience of the instructor with the work taught is recognized in these tables by the figures for weighted values presented under the rubrics "first-time" work and "non-first-time" work. The tables not giving recognition to this factor are those presenting weighted values for scheduled conference, shop, and field, and these omissions are to be explained by the attenuated distributions or complete absence of "first-time" work in these modes in the data used in this study.

Concerning the validity of the method of computing the weighted values.—Throughout the description of the method of computing the weighted values of Table 18, etc., some such queries as the following may have arisen in the mind of the reader: Why obtain the weighted values by the method of proportional equations here used instead of from one large original distribution table, which should be so organized as to analyze the influence of all the hypothetical factors at one time, and from which the correct average number of hours of work per clock hour of instruction could be directly taken without the interposition of the method of proportional equations? And, again, is there not a measure of fallacy in this method of indirect computation through proportional equations, due to a confusion of factors in the tables devised to analyze the influence of these factors? The former of these queries may be answered by saying that the method it implies to be the more satisfactory was the first one tried in attacking the data, but was found to be impracticable because the distributions of clock hours became so attenuated in a table providing so many refinements that no dependable averages could be obtained. This impracticability will come home to the reader if he will imagine the distributions of clock hours in Table 12 again broken into the

three classes of lower, upper, and graduate division work, and these distributions again divided into "first time," and "nonfirst time" groups. Manifestly, to have fairly large numbers of clock hours from which to calculate the averages, resort must be had to a method similar to the one used.

A frank answer to the second query must admit the possibility of a slight extent of fallacy, due to the confusion of factors in the tables planned to analyze the influence of the factors, but careful reconsideration of the construction of these tables and the method of calculating the weighted values will show that the possibility of error is by no means large. In addition to the original distributions used to compute the average year place of the work reported in a subject or subject group, as illustrated on page 49, it may be remembered that the only tables that have been used in the computation of the weighted values are 12, 13, and 14. Table 12 recognizes mode of presentation and subject, leaving out of consideration the elementary or advanced character of and previous experience or inexperience with the work. That is, in attempting to analyze the influence of the former two factors the averages thus obtained have also been influenced by the two remaining factors. It must be recalled, however, that before the averages for subjects in this table were used in computing the weighted values, the average year place of the work reported in a subject was computed, and this year place given recognition in the computation. In this way the confusion that ignoring the influence of this factor of the elementary or advanced character of the work would bring has been largely eliminated. The remaining factor—previous experience or inexperience with the work—is the only one that has been ignored in utilizing this table. That disregard of this factor in using the averages of this table is not disastrous to the reliability of our method may be judged by comparison of the averages for nonfirst time work and all work in Table 14. Except in two instances—lecture and seminar—these averages for nonfirst time work and all work are equal or almost equal, and in these two cases they differ by 0.40 and 0.25 of an hour, respectively. This tendency toward a small difference or identity in these averages is due to the relatively small proportion the "first time" clock hours are of all clock hours reported. As the averages in Table 12 are for all work, it should be clear that weighted values based upon them are not much discredited by the fact that this factor of previous experience or inexperience with the work has been disregarded.

Table 13 analyzes the influence of mode of presentation and the elementary or advanced character of the work, but disregards the incidence of the influence of subject and previous experience or inexperience with the work, while Table 14 analyzes the influence of mode of presentation and previous experience or inexperience with

the work, disregarding subject and the elementary or advanced character of the work. The subject as a factor is disregarded in both these tables, but by using as our basic figures in the computation of the weighted values the averages by subjects in Table 12, the influence of this factor has been introduced in the weighted values. The relative inconsequence of disregarding previous experience or inexperience with the work has already been discussed in connection with the use of the figures in Table 12 in a preceding paragraph. The disregard of the influence of the elementary and advanced character of the work that follows from using the averages of Table 14 may to a slight extent affect the weighted values in undesired directions.

In the face of these admissions of sources of partial weakness of the method of computing the weighted values, we ought not to forget that the incidence of such untoward influence, where such large numbers of clock hours are concerned as in these tables, will tend to be so distributed as in large part to mitigate the evils that may arise.

Application of the method of adjusting the teaching load.—We may now proceed to illustrate the method of application of the weighted values to the adjustment of the teaching load. In doing so, in order to make the illustrations readily intelligible, any necessary special allowance for the remaining components of the total working load, viz, supervision of students working on individual research problems, personal research, office hours, committee, and administrative work, and other professional activities, will at first be left out of consideration. That is, we shall set out by illustrating the application to instructors who are expected to carry a full teaching load without *special* additional activities. For such illustration we must first have before us the normal number of hours per week devoted to teaching work by full-time instructors. Group 3 of Table 9 (p. 23) shows the average length of the teaching day of such full-time instructors to be 6.1—approximately 6 hours. As this has been calculated from a school week containing $5\frac{1}{2}$ teaching days, this will mean an average total teaching week of 33 hours, which will be used as the point of departure in ascertaining the clock hours of instruction that should be carried. Reference to the remaining figures for group 3 in this table will discover that this allows to the average full-time instructor approximately 2 hours (column 4b) of an average approximate eight-hour day (column 5b), or 11 hours per week for noninstructional activities.

The illustrations to follow aim to demonstrate the application of the weighted values to some of the main types of problems likely to arise in the adjustment of the teaching load. To illustrate for all types of problems and for all subjects or subject groups would be both unnecessary and a waste of space and time.

(a) The first illustration—a very simple one—is that required to answer the question, how many clock hours of instruction should be assigned to a teacher of foreign language who carries only lower-division work and has had previous experience with the courses to be taught? Table 18 shows the weighted value of a nonfirst-time clock hour of lower-division recitation (the mode of presentation almost universal in this subject group in this division) to be 1.64 hours. Dividing 33 by 1.64 we have a quotient of approximately 20, the number of clock hours of such instruction that should be carried. If the instructor is new to his work, we should divide 33 by the weighted value 1.83 (see first-time column of Table 18), the quotient obtained signifying that he should carry 18 clock hours—i. e., 2 clock hours less than if he had had previous experience with the work.

(b) However, in practice few instructors are assigned work solely in one division, as has been assumed in this illustration. More frequently the work is distributed in two or three divisions. The problem here might come up in something like the following manner: Is an instructor in foreign language carrying a full teaching load if he is responsible for a 5-hour course in lower division; two 3-hour courses in upper division, one of these being conducted by the recitation mode of presentation, and the other being a course in the history of the literature in this language, by the mixed lecture and discussion mode; and a 2-hour seminar—all these courses except the last having been previously taught by him? From Table 18 we find that the 5-hour course in the lower division represents a total weighted value of $5 \times 1.64 = 8.20$; the 3-hour upper-division recitation course has a total weighted value of $3 \times 2.02 = 6.06$; the 3-hour upper-division mixed lecture and discussion course (Table 20), $3 \times 2.48 = 7.44$; the 2-hour seminar, $2 \times 3.21 = 6.42$. The total weighted value is 8.20 plus 6.06 plus 7.44 plus 6.42 = 28.12—i. e., 4.88, or almost the equivalent of a 2-hour upper division mixed lecture and discussion course less than should be carried.

(c) Application may also be made for instruction in English. It may be asked how many clock hours should be assigned to an instructor carrying work solely in the lower division, provision first being made for 10 clock hours of scheduled conference? According to Table 21 the total weighted value of these 10 hours of scheduled conference is $10 \times 1.11 = 11.1$. Subtracting these from the total of 33 hours, we have 21.9 hours to be assigned to recitation clock hours at the weighted value of 1.76 hours each. This means 21.9 divided by 1.76, or approximately 12 such clock hours.

(d) If the problem is that of the adjustment of the teaching load of an instructor of English who carries a 5-hour recitation course in the lower division, the remainder of his time, exclusive of 10 hours

of scheduled conference equally divided between lower and upper division, being devoted to mixed lecture and discussion work in the upper division, it will be solved as follows: The total weighted value of the lower-division recitation (Table 18) course is $5 \times 1.76 = 8.80$; of 5 hours of lower-division conference (Table 21), $5 \times 1.11 = 5.55$; of 5 hours of upper-division conference (Table 21), $5 \times 1.33 = 6.65$. So far, 8.80 plus 5.55 plus 6.65, or 21 hours of the total of 33 have been disposed of, leaving 12 hours for assignment to upper-division mixed lecture and discussion. This will mean 12 divided by 2.18, or approximately 5 or 6 hours of such work.

(e) Illustration of such application in the department of education is a relatively simple matter. The most frequent mode of presentation here is mixed lecture and discussion. For an instructor who is teaching only upper-division work with which he has had previous acquaintance, this proper number of clock hours of instruction will be 33 divided by 2.61 (see Table 20), or approximately 13.

(f) Illustration for the field of science is not as easy, as almost always two or more modes of presentation are involved. The problem may arise in the following manner: An instructor carries the lecture and oral-quiz work of two lower-division courses in science with which he has had previous experience. These include, together, 6 lecture hours and 2 quiz hours. He is to carry laboratory hours in addition up to a full teaching load; it is desired to know what this number of laboratory hours should be. According to Table 19 the weighted value of the lecture hours is 6×2.09 , or 12.54. From Table 21 we find that the weighted value of the quiz hours is 2×1.94 , or 3.88. This is a total of 16.42 hours, leaving 16.58 of the average of 33 hours to be applied to laboratory at a weighted value of 1.28 (see Table 22), which means 16.58 divided by 1.28, or 13 clock hours of laboratory.

(g) As it is a relatively new field, some interest may attach to an illustration of application in the adjustment of the teaching load in home economics. Our illustration may assume 3 clock hours of mixed lecture and discussion and 12 clock hours of laboratory, all nonfirst time work, in the upper division, the remaining portion of the instructor's teaching load to be given to lower-division laboratory. The 3 hours of mixed lecture and discussion¹ (see Table 20) have a weighted value of 3×2.37 , or 7.11. The 12 clock hours of laboratory (see Table 22) have a total weighted value of 12×1.32 , or 15.84. Thus, 7.11 plus 15.84, or 22.95, hours of the average teaching load of 33 hours are used in this upper-division work, leaving 10.05 hours to be devoted to lower-division laboratory at a weighted

¹ As has been previously explained (p. 48), because of the small number of clock hours of mixed lecture and discussion reported for this department, the weighted values for all subjects given in the lowest horizontal column of this table are used.

value of 1.42 hours (see Table 22) per clock hour. This means approximately 7 such lower-division laboratory clock hours.

(h) As a last illustration let us apply the weighted values for teaching work in law to the adjustment of the teaching load. It has already been stated (p. 49) that the mode of presentation commonly reported for law is recitation. The weighted value for the upper-division recitation clock hour in law (see Table 18) is 3.55. Dividing the average teaching load, 33 hours, by this value, we arrive at a teaching load of 9 clock hours.

Having illustrated the method of adjusting the teaching load of full-time instructors, it is now appropriate to address a word of explanation and justification to one feature of this study—the consistent use of and dependence upon the average or arithmetic mean. The reader has noted its use in computing the foundation measures of the number of hours of work done in connection with a clock hour of instruction; these are the averages upon which the tables of weighted values were constructed. It was also used to arrive at the number of hours per day which the full-time instructor may be expected to devote to instruction (approximately 6 hours) as well as to all professional activities (approximately 8 hours). It has been introduced into computations at other points in the study. The average has been consistently used because it is the *average* instructor (here used in terms of rate of working) for whom the university must adjust the teaching load. It would clearly be out of question for the university to adjust teaching loads by the rates of working of *individual* instructors. For instance, because the university administration must expect an approximately equal amount of service of all instructors, it would be unfair to the university to adjust teaching loads of individuals who are slower than the average to their rate of working. On the other hand, it would be unfair to those who work at a more rapid rate than the average to adjust their teaching loads to *their* rates of working. In other words, the instructor slower than the average must expect to pay the penalty of his slowness in longer hours of work, whereas the instructor who is more rapid than the average of his colleagues should have the margin of time which he gains by his more rapid rate to dispose of as he chooses.

It remains to comment briefly on the adjustment of the teaching load by the making of necessary special allowances for other possible components of the total working load—viz, (1) supervision of students working on individual research problems, (2) personal research, (3) office, committee, and administrative work, and (4) other professional activities.

(1) On page 10 it is stated that the time required for the supervision of students working on individual research problems averaged

0.76 hour per student. One or two such students could not affect the total working load of an instructor sufficiently to necessitate a special allowance on account of the amount of supervision required, and, as it may be seen from Table 2 (p. 11) that only 20 instructors report as many as three or more, such a special allowance will need to be made in only a relatively small proportion of cases. As has already been stated on page 11, if no adjustment has already been made in assigning to the instructors the courses in which these students who are working on individual research problems are enrolled, it will be advisable to make some reduction in the teaching schedule for those who must supervise four or more students in such work. Such adjustment may be made by subtracting from the basic 33 hours of instructional time the number of hours that will probably be required for the work of supervision—this number of hours to be obtained by multiplying 0.76 by the number of such students—before proceeding to fix the number of clock hours of instruction to be carried.

(2) As in the case of the supervision of students working on individual research problems, the essential principle to be recognized in making special allowances for personal research has already been enunciated in an earlier section of this report (p. 25). The recommendation has been against a general reduction of the teaching schedule, because the facts indicate that this would not be an economical method of encouraging personal research. The method supported by the facts presented is the reduction of the teaching schedule for individual instructors who have demonstrated their inclination toward and ability in research by some measure of productivity in spite of a normal teaching schedule. The exact extent and significance of any allowance made will be more nearly measurable if made either as a reduction of the normal load of 33 hours of teaching work (a) by some definite number of hours of this teaching load or (b) by a definite number of some specific kind of clock hour of instruction whose weighted value is known than if stated in terms of unspecified clock hours. For instance, a reduction by 10 hours of the normal teaching load of 33 hours would leave 23 hours of teaching work to be distributed by means of known weighted values to a definite number of clock hours of instruction. Again, a reduction of this normal load by two clock hours of nonfirst time upper-division mixed lecture and discussion in science would leave $33 - (2 \times 2.36)$, or 28.28 hours, to be distributed by means of known weighted values to a definite number of clock hours of instruction. It is easily conceivable that a reduction in terms of unspecified clock hours for an instructor who has been teaching nonfirst time lower-division work might be offset by assigning to him a less number of clock hours of first time upper-division work and such an assignment might still be in compliance with the terms of the provision for a reduction. If a

reduction is to be made in terms of clock hours, the kinds of clock hours ought at least to be specified, since, assuredly, judging from our weighted values, a reduction, e. g., of 2 clock hours of nonfirst time lower-division recitation in foreign language would not be the equivalent of a reduction of two clock hours of first time upper-division lecture in the same subject group. Of the two methods of specifying an allowance of teaching time for personal research which are here recommended, the former is the preferable, unless in using the latter it is understood that the *equivalent in weighted value* of the specified clock hours, not the specified clock hours themselves, is meant. To insist on a reduction in specified clock hours themselves might bring inconvenience to those who are responsible for distributing courses within a department.

(3) It has been pointed out on page 16 that relatively few full-time instructors (i. e., instructors who are not also heads of other than one-man departments or deans) will require special reductions of their teaching schedules for office hours, committee and administrative work. Such reductions are to be made only when the regular demand upon an instructor for this type of activity is much more than the average of 3.6 hours per week found for full-time instructors. The need for this average amount of time is recognized in the 2 hours per day of leeway between the average teaching day of approximately 6 hours and the average total working day of approximately 8 hours. It was also stated that allowances should be made for heads of other than one-man departments and for deans. The difference between the average number of hours spent in the activities under consideration by heads of departments (exclusive of the one reporting 41.3 hours for the week) and by full-time instructors being approximately 7 hours, for the average head of a department the normal load of 33 hours of teaching work should be reduced by this amount or its equivalent in specified clock hours of instruction. The difference between the averages for deans who are also heads of departments and for full-time instructors being approximately 15 hours, for the average dean the normal load of 33 hours of teaching work should be reduced by this amount or its equivalent in specified clock hours of instruction. But, since the demand for such activity must be heavier for some heads of departments and deans than for others, such reductions, to be just and economical, should not be uniform for all heads of departments and for all deans. On account of the short period of time—one week—covered by the reports used in this study, no recommendation can be made here for specific heads or deans. A supplementary investigation extending through a longer period of time must be made before reductions may be made in whose justice we may place much confidence.

(4) In an earlier section of this report (pp. 17-18) such facts as have been available touching the time spent in "professional activities not otherwise reported" have been presented and interpreted. Notwithstanding that no recommendation could be made in the matter of reduction of teaching time for most of the subjects and subject groups represented in this investigation, the facts indicated that for some subjects—the newer and more rapidly developing ones—the demand upon the instructor of these other professional activities is heavier than for others, and that for the former subjects, when the average number of hours per week exceeds notably the average of 5 to 6 hours found for all instructors, there should be a corresponding reduction in the teaching schedule for particular subjects or instructors. For subjects in which and instructors for whom the demand for such activity is at this average or less, there should be no such allowance, as it is already cared for by the leeway between the average 6-hour teaching day and the average 8-hour working day of full-time instructors. When allowances are made they should be made as reductions of the normal load of 33 hours per week of teaching work or the equivalent of the reductions in specific clock hours of instruction. As soon as it appears that such concessions are no longer necessary or are no longer properly utilized, they should be withdrawn. Because of the paucity and weakness of the figures for subjects and subject groups as presented in Table 7, before the extent of such concessions may be justly determined a supplementary investigation should be made into the time spent in these other professional activities either by a larger number of instructors or through a longer period of time, or both. Such a supplementary investigation should distinguish between activities that bring additional remuneration and those that do not—an important distinction which was overlooked in the present investigation.

APPENDIX.

THE QUESTIONNAIRE USED IN THE INVESTIGATION.

Sheet 1.

This questionnaire is being sent to all teaching members of the faculty with the aim of securing data that will throw further light on the problem of the proper assignment of teaching hours. In this instance we are investigating one important aspect of the relative difficulty of the several types of work, that which is represented by the total time consumed in carrying them on. You are asked to take note of all time spent outside the class period in preparation for and in connection with the courses and sections you are teaching, as well as in other activities, and to record the time in the appropriate spaces. Your report should cover the class and other work included in the school week beginning Monday, May 14, and ending Saturday, May 19.

In this investigation there is no intention to check up the total time expenditure of the individual faculty member with a view to measuring his teaching efficiency.

IMPORTANT DIRECTIONS.

(a) Read the questionnaire carefully as soon as possible, noting the classifications of time expenditure, in order to avoid making a report that can not be used when the data are finally assembled.

(b) Your reports on the time spent outside the class period in preparation for and in connection with the class work and in other activities outside the class periods should not be mere guesses but should be based on reference to a timepiece.

(c) Make a report for each course or section for which you have teaching responsibility. If you are conducting only a part of the work in a course, e. g., quiz, laboratory or lecture section, reading papers, etc., the remainder of the work being conducted by some other person, be sure to make this fact clear in your report. Give the time only for the work for which you are responsible and state specifically what parts of the work are done by others.

(d) If the same preparation suffices for two or more sections of the same course, distribute the time in equal parts to each of the sections.

(e) Be careful otherwise to avoid recording the same time expenditure in more than one place.

1. Number of students working on individual research problems under your supervision during the present semester Number of minutes spent in such supervision, if any, during the week of May 14-19

2. Time spent during the week in research other than that reported elsewhere on this and the accompanying sheet, minutes.

3. Time spent on other official duties for the university (office hours, committee work, administrative functions, etc.), minutes.

4. Time spent in professional activities not otherwise reported, _____ minutes. List here these activities. _____

5. If it is your opinion that any of the courses on which you are reporting should be conducted in some manner (lecture, laboratory, recitation, etc.) other than that which you indicate on page 2 as now obtaining, state specifically in what manner it should be presented, and why. (Use back of this sheet for answer.)

(Answer the following two questions after having filled out the remainder of the questionnaire:)

6. Has the week reported upon been a fairly normal one? _____
If not, in what specific respects has it been exceptional? _____

7. State your opinion of the use of the "total time consumed" as a factor in the determination of the proper number of teaching hours. _____

Name _____

Sheet 2.

Record totals for week in the appropriate spaces below. Report under Nos. 8, 10, 12, 14, 16, 18, 20, 22, 23, and 24 in the left-hand column time spent outside the class periods only.¹

1. Department.							
2. Course and section (make a separate report for each section).							
3. Credit carried by course.							
4. Is this the first time you have taught the course?							
5. Year or years in which course is normally taken, ² 1, 2, 3, 4, 5, 6.							
6. Enrollment during semester.							
7. Hours of recitation.							
8. Total minutes of preparation for recitation.							
9. Hours of lecture during the week.							
10. Total minutes of preparation for lectures during the week.							

¹ Data relating to one course or section should all be placed in one vertical column.

² 1 for freshmen, 2 for sophomores, 3 for graduate courses and professional courses requiring four years of previous training, etc.

11. Hours of oral quiz during week.							
12. Total minutes of preparation for oral quiz.							
13. Hours of mixed lecture and discussion.							
14. Total minutes of preparation for mixed lecture and discussion.							
15. Hours of laboratory.							
16. Total minutes of preparation for laboratory and reading of laboratory notes.							
17. Hours of shop and practice.							
18. Total minutes of preparation or other work in connection with shop and practice.							
19. Hours of seminar.							
20. Total minutes of preparation for seminar.							
21. Hours of <i>scheduled</i> conference (not office hours).							
22. Total minutes of preparation for scheduled conference hours.							
23. Total minutes of correction of written and other work (not laboratory notes) outside the class period.							
24. Total minutes in other work for the courses listed not reported elsewhere. Specify the kind of work.							

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FOREWORD.

The curriculum here presented is a response to a definite need frequently expressed by kindergarten teachers, primary teachers, and school men. The work of the different grades has been fairly standardized as to subject matter and method, and is usually outlined quite definitely for the guidance of teachers in the course of study. But because the kindergarten is a relatively new movement and its work has not yet become standardized, the course of study seldom includes a similar outline to guide the kindergarten teachers in their work. This fact was brought out by an inquiry recently made by a committee appointed by the International Kindergarten Union. In order to determine to what extent the work of the kindergarten had been definitely formulated to correspond to that of the grades in the course of study, the chairman, Miss Anna Littell, wrote to 120 representative cities, asking what had been done in this direction. Of the 80 replies received, 30 contained the statement that only a general plan existed and that each kindergarten teacher was allowed to carry on her work as she thought best; 25 contained typewritten copies of plans which were being carried out by the kindergarten teachers in a general way; and 25 contained copies of the printed course in which the work of the kindergarten was outlined as was that of the grades.

The fact that the work of the kindergarten has been put into organized form in so few places is no evidence that it is not being well done; but there can be little doubt that it would be better done if the scope, aim, and method of its work were definitely given wherever the kindergarten has been adopted. Such a statement, if adequately made, would be of great value to hundreds of kindergarten teachers in places too small to furnish expert supervision. It would interpret the kindergarten to those primary teachers who are still unacquainted with it and show them what foundation it furnishes for their own work. It would give superintendents and principals a basis for evaluating the kindergarten, and enable them to indicate how its work should be coordinated with that of the grades to follow. Since the kindergarten can not really function in the school as a whole until the coordination in question has been effected, the statement referred to is important as a means to a much-needed end.

The kindergarten has exerted a marked and lasting influence upon the spirit and methods of the school. That influence is due in part

to the fact that in the early years of the kindergarten movement kindergarten teachers were allowed freedom to work out their own ideals and methods. The value of the kindergarten as an institution has been amply demonstrated. As an organic part of the school as a whole, however, its value can be appreciably increased. In order to realize this greater value, its work needs organizing so as to show how its own lines of work form the foundation of that which is to follow. This doubtless implies some reorganization of its own work and also of that of the first grade.

The present-day conception is that the period from four to eight years in a child's life is psychologically one period, and that the methods of both kindergarten and first grade should possess the same general characteristics. Where this conception is logically carried out, there is no break between kindergarten and first grade. Where the break exists, it is evident that either the one or the other lacks the right foundation, or that the work of the one has not been organized with reference to the work of the other.

The fact that a more fundamental coordination between the kindergarten and the first grade is needed is increasingly recognized, and some valuable beginnings in this direction have been made. Much remains to be done, however, and the problem seems to be one for the kindergarten-primary supervisor to solve in cooperation with both kindergarten teachers and primary teachers. One of the difficulties that such supervisors meet in attempting its solution is the lack of a common viewpoint on the part of the two groups of workers. The first step, therefore, is to increase the acquaintance of both groups with present-day educational theory and its implications as to methods in both the kindergarten and the first grade. Several books have been written recently that will further this acquaintance. These interpret the work of the grades to the kindergarten teacher more adequately than they interpret the work of the kindergarten to the grade teacher. An understanding on the part of each group of the work of the other is essential, however, if the desired coordination is to be effected.

It is because a better knowledge of the kindergarten on the part of school people is necessary to enable kindergarten teachers to do their own best work and to make possible the needed coordination, that the advisory committee to the kindergarten division of the Bureau of Education has undertaken to organize a curriculum showing in some detail the aims, methods, and results of kindergarten education in its several aspects. The group of kindergarten teachers to whom the task was delegated believe a restatement of aims and methods in terms of present-day educational theory to be essential to its fullest accomplishment. They hope that such a statement will enable kindergarten

teachers who are still following traditional methods to see their work in a new light and to understand the reasons for the changes now advocated in kindergarten material and methods. They hope that the statement will aid primary teachers to see the psychological basis for kindergarten procedure, and show them wherein their own methods may need changing in order to secure real continuity of experience for the child during these early school years. It can not fail to show, if only by implication, that the larger knowledge of the child's development now available has made experimentation inevitable. The work here suggested is experimental in the sense that it is a departure from the method of the past, but it is guided by a clear vision of the problem to be solved by means of it. Experimentation of this kind will be needed in both the kindergarten and first grade before the unification called for can be effected. The committee hope that the curriculum here presented will stimulate both kindergarten teachers and primary teachers to the end that each may function more fully in the development of the child and in the administration of the school.

The general plan of organization followed by the committee in preparing the curriculum for the kindergarten was determined in preliminary conference. Each member of the committee then selected or was assigned one or two subjects of the curriculum in which she was to prepare a tentative course of study. These several courses of study, when completed, were submitted to all members of the committee, criticized by them, and returned to their respective authors for revision. In some cases two persons collaborated in preparing a single course of study.

The curriculum here offered is the outcome of the effort of the committee to formulate certain general principles as to aims, materials, and methods which they believe should control all curricula, and to illustrate these in their application to a particular situation. The committee wish to emphasize their belief that a course of study for the kindergarten, or for any single grade, should be made with reference to the particular needs of the children with whom it is to be used, these needs differing with locality, the experience of the children, their degree of maturity, the social status of the parents, etc. The committee hope that this contribution to the problem may be suggestive and helpful in determining standards for kindergarten procedure.

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THE KINDERGARTEN CURRICULUM.

Chapter I.

GENERAL STATEMENT.

The curriculum of the kindergarten is composed of a variety of subjects and activities selected because of their value in meeting the needs of children from 4 to 6 years of age.

The subject material of the kindergarten curriculum represents experience common to the group of children concerned. It includes experience gained from their contact with (1) natural objects and phenomena (nature study); (2) human beings and human activity (home and community life); and (3) some of the products of human intelligence (literature, music, art, etc.).

The activities of the curriculum, oral expression, manual work, drawing, singing, dramatic play, games, etc., are avenues of expression through which experience is defined, interpreted, and organized. Each of these forms of activity satisfies some one or more of the fundamental impulses of the child, and, if rightly used in the school, contributes its peculiar share toward his development and education.

Each phase of the kindergarten curriculum finds its counterpart in the curricula of our best primary grades, with reading and writing as additional forms of activity and expression. The work in each subject or type of activity common to the kindergarten and primary grades, therefore, should be so arranged that continuity is secured.

Now that the kindergarten has become a well-established part of the public-school system, the question is often asked whether reading and writing should not be introduced in the latter half of the kindergarten year. In answer, it may be said that it is now generally conceded that not all children are ready to begin these subjects at exactly the same age. At some point, almost anywhere between the years of 5 and 7, the child is eager to write his name and to interpret some of the printed and written forms which he sees about him. He is ready to extend his control of language to include ability to read and write, activities which his elders apparently find so interesting

and important. When this time comes, the teacher, whether her class is designated as kindergarten or first grade, should be prepared to teach these subjects according to the best-known methods.

Methods of teaching reading and writing are now very generally included in the training of kindergartners. Teachers in the field who have not had such training should secure it for themselves. All teachers would then be able to give their children these "next steps" in the development of language control when in their judgment the time is ripe.

Likewise, teachers of first grade should be prepared to carry on successfully the types of work characteristic of the kindergarten with those children who, because of immaturity, are not ready to profit by instruction in reading and writing. Indeed, it is probable that the teaching of these subjects is more often begun too early in the child's school life than deferred too long. Both mistakes will be more easily avoided, however, when all teachers of the kindergarten and lower grades are equipped to teach a child whatever he needs to be taught during the first three or four years of his school life.

A committee is now at work upon a curriculum for primary grades based upon the curriculum for the kindergarten which is here presented. This committee will doubtless do full justice to the subjects of reading and writing, and will show the intimate relation of these subjects to other phases of the kindergarten-primary curriculum. It is not necessary, therefore, to discuss the matter further in this document.

In the following pages the several subjects of the kindergarten curriculum will be discussed in terms of: *Aims; Subject Matter; Method; Attainments.*

Chapter II.

SUBJECT MATTER: COMMUNITY LIFE AND NATURE STUDY.

Little children do not differentiate between experiences gained from social contacts and those having their source in nature. They are interested in what people are doing, and in natural objects and phenomena as these are connected with human activity. It seems desirable therefore to make no sharp distinction between these two types of experience in organizing the program.

AIMS.

To encourage interest in the significant phases of the environment.
To correct, extend, interpret, and organize experience.
To cultivate desirable attitudes and habits.

SUBJECT MATTER.

If these purposes are to be realized, certain fundamental considerations must be kept constantly in mind when planning the program.

1. The subject matter selected must be something which appeals to the children as interesting and significant. It must be, for the most part, therefore, something which they may use and enjoy in the pursuit of their activities and play projects, or which satisfies the desire for new experience. Children indulge spontaneously in imaginative play, which is suggested by the familiar occupations of adults and of older children. They play at housekeeping, caring for children (dolls), building, buying and selling, traveling, going to school, skating, etc. Materials, facts, ideas (subject matter), which enable them to carry on these plays more completely and satisfactorily are eagerly appropriated. Similarly, nature materials and forces which the children can make use of in their play occupations are the things in nature which hold their interest longest.

2. The aspects of home and community life which are selected must not only be of interest to the children but they must be selected with reference to their importance and meaning in social life. For these are the interests which are worth while to develop. Activities and objects

related to such universal human needs as food, clothing, shelter, rest, recreation, beauty, etc., are among these.

3. The daily experience of the children will include some interests, impulses to activity, and emotions, which, although not related to the series of topics which have been selected, should nevertheless be given opportunity for expression. A rainy day, with its interesting accompaniment of rubber boots, raincoat, and umbrella, might call for expression through dramatic play, drawing, or song, which would be much more significant on that day than anything relating to the larger unit of work or project which was being carried on. Many valuable nature experiences are incidental to the daily program. Little children delight in the movement of animals, the color of leaves and flowers, the curious shapes of shells. They gaze in wonder as the moth slowly emerges from its cocoon, and spreads its brilliant wings. They are attracted by the appearance of the moon and stars and other natural objects. As these interests manifest themselves from day to day, they should be encouraged through suitable forms of expression.

4. Finally, there are forms of play and activity needed for the children's complete development which are not suggested by the subject matter referred to above. Children need opportunity to experiment with and express their own images and ideas in concrete materials; they need many songs and stories which bear no relation to the selected subject material, but which are closely related to the interests, impulses, and emotions of childhood; they need freedom to move about, change their position, and thus through spontaneous activity of one sort or another expend accumulated surplus energy. Examples of these various types of activity will be found in subsequent chapters.

METHOD.

In general, the method of using subject matter selected from home and community life, or from nature study, involves the following:

1. Recall of familiar experience through real objects, toy representations, pictures, conversation, or through some closely related experience.

2. Extension or interpretation through excursion, or by means of objects or processes in the schoolroom, etc.

3. Interpretation and organization through one or more of the several avenues of expression or forms of play. The third step usually involves for the child a problem which he will be interested in solving. For example, suppose the children have been shaping cookies of clay. The question of baking may present itself, and they then realize that baking tins and ovens are needed. The first problem for the child

may be, "How can I change this piece of paper into a pan to hold my cookies?" The next problem follows, "How can I make an oven in which to bake this pan of cookies?"

SUBJECT MATTER OUTLINE.

The following outline of topics is offered as illustrative of the standard set forth in the foregoing pages. It is subject matter which has been found valuable in a school located in an open city district. The children come from good homes. The parents are educated, American-born citizens. The material represented in the outline has been drawn directly from the experience of this particular group of children. It is believed, however, that the general topics will be suitable in many environments. The subtopics will necessarily vary with different communities.

September, October, November.

1. *Life in the home:* The family; care of the home; preparation of food for the family.

2. *Sources of food:* The garden and farm; the market, the peddler, the dairy; occupations related to the supply of food; direct attention to the food products, fruits, vegetables, grains, eggs, milk, bread, butter, and to some of the simpler processes involved in food getting.

3. *Seasonal activities and interests:* Preserving and canning for winter; planting bulbs; gathering flowers, leaves, berries, seeds, nuts, etc.; collecting caterpillars; preparation for and celebration of Thanksgiving.

December.

Preparation for Christmas: "Santa Claus;" the toy shop; making gifts; the Christmas festival and tree.

January, February, March.

1. *Life in the community:* Houses for different families; streets, walks, street lights; modes of transportation in the community; public buildings needed by the many families; various shops and stores; post office; fire department; school; church.

2. *Seasonal interests:* Out-of-door play in snow and ice; heating and lighting of homes and other buildings; celebration of St. Valentine's Day; recognition of Washington's Birthday; care of plants now grown from bulbs planted in the autumn; care of pet animals, fish, birds, etc.

April, May, June.

1. *Occupations related to clothing:* Making clothing; buying material at store or shop.

2. *Seasonal activities and interests:* Life in the park and playground; excursions to observe signs of spring, budding of trees, birds returning, coming of wild flowers; out-of-door play with marbles, tops, etc.; gardening: raising chickens or doves; celebration of Easter; celebration of May Day.

EXPLANATION OF OUTLINE.

September, October, November.

1. *Life in the home:* The necessary work involved in housekeeping, especially that related to the supply of food for the family, furnishes excellent subject matter for the fall program. It is all very familiar; the activities involved are simple and objective, and they are intimately related to the welfare and happiness of the children themselves.

A few well-selected toys, such as a bed, a stove, a broom, a tub, and some dolls, will suggest the housekeeping plays. Large floor blocks may be used to make more beds, stoves, ovens. Clay may be used for bread, cookies, cake, etc., to be baked. The older children may make bedding for their doll beds. Paper napkins and doilies will be needed to carry on the dining room plays. Designs developed from berry and seed stringing described below are sometimes applied in decorating the doilies. The art impulse may be conserved also by attention to the arrangement of table furnishings and the effective placing of flowers on the table.

In order to keep the children's interest and attention centered on the household activities and to furnish motive for many of the plays and occupations, a playhouse may be provided in one corner of the room by means of a screen. Here the toys and block constructions may be kept from day to day, additional furniture and equipment supplied as need arises, and the life of the family in the home, their work and their pleasures, dramatized fully and freely.

The teacher may suggest a real luncheon or tea party which will necessitate a trip to the grocery store, the dairy, or the bakery. A cereal or some other food easily prepared may be bought, cooked, and served by the children themselves.

A series of plays and occupations of this kind, developed largely by the children themselves and supplemented by pictures and conversation, serves to bring isolated ideas, experiences, objects, and processes into their true relation in the children's thought, and to stimulate them to further organization of experience through play.

2. *Sources of food:* The excursion to the store suggests the desirability of a play store in the schoolroom, and this may now become the next project. It will call for much experimentation with building

blocks and boards. It can be worked out on a small scale by each child and later reproduced with the large building materials by the group as a whole. To stock this store, which is large enough for several children to play in at one time, furnishes numerous problems for the children to solve, and affords them excellent experience in selecting and shaping materials to serve their play purposes. Further suggestions as to materials and method, dramatization, etc., will be found in subsequent chapters.

The extent to which garden and farm become centers of interest depends necessarily upon the children's experiences. A miniature sand table farm, showing buildings, fields, farm animals, etc., is an interesting and valuable play project for children who are familiar with farm life.

Play with real fruit, grains, and vegetables in the grocery store or in connection with preparing and serving food in the home will give an opportunity for as much emphasis upon the process of food getting as is desirable. The making of butter is a process which even little children can carry on successfully, and they may help in making jelly. Both butter and jelly may be saved and used at the Thanksgiving festival.

3. *Seasonal activities and interests:* Parallel with the interest in these domestic and industrial activities will be interest in the season and some of its characteristic aspects. Bulbs may be planted in the fall for early spring blossoming. Seeds, berries, and autumn leaves may be gathered, sorted, and made into chains and wreaths. As autumn flowers are brought in, the children may arrange and place them in the room. Interest in observing the caterpillar spin a cocoon will be stimulated by taking the children out to find caterpillars and helping them to provide some means of keeping them.

The program for the season culminates in the preparation for and celebration of Thanksgiving. The children have had some share in preparing food for future use in the butter making and preserving. They have seen fruits and vegetables in abundance in the markets. They have gathered some vegetables from their own gardens. These direct experiences, enriched by pictures, conversation, song, and story, will help the children to some realization of the meaning of the harvest season. They may prepare for Thanksgiving Day by decorating the room appropriately and beautifully, and by preparing and serving a simple luncheon for their mothers. The bread may be spread with the butter and jelly which they have helped to make, and they may construct little paper baskets to hold the nuts they have cracked.

Children of kindergarten age can not understand the historical significance of this holiday; hence it is a mistake to give it to them.

The social significance of the day, however, may be realized by the children through associating it with the harvest and the pleasure that comes from sharing good things with their family and friends. This will lay the foundation for the appreciation of the spiritual significance of the festival, which will come to the children at a later period in their development.

Halloween is a day for the children to enjoy with other children. It may be made the occasion for a kindergarten and first-grade party, and thus help to foster the social life of the school as a whole. The celebration should emphasize the wholesome, legitimate humor that is associated with the jack-o-lantern and the antics of the elves and brownies.

December.

Preparation for Christmas: The outline for December suggests that the three school weeks of this month be devoted to work and play related to Christmas. The little child's associations with this day are in terms of Santa Claus and toys. The story, *The Night Before Christmas*, recalls all the joys of the Christmas season. The children should be given full opportunity to reproduce parts of the story through materials and in imitative and dramatic play. The making of a toyshop and toys will stimulate the children to their best efforts in construction and supply incentive for further dramatic play. Songs and stories which interpret the activities in which the children are engaged, or the mood aroused by the experiences they are having, will enhance the value of the entire Christmas experience. The song, *Who Will Buy My Toys?* is an example of a play activity in poetic form. *The Shoemaker and The Elves* is a story closely related to the Christmas experience, because it deals with the making of gifts and contains the element of surprise. The spiritual significance of the festival may be emphasized in some communities by telling the story of the First Christmas.

After such happy experiences as these, the children will be ready and eager to plan and make gifts for their parents. This Christmas festival should be the most beautiful of the year. The work should be so planned that hurry and strain in connection with making gifts are avoided. All preparations should be accompanied with pleasure in doing and joy in anticipation. The gifts should be carefully wrapped and tied or sealed. Attractive and appropriate invitations to the festival should be planned and made by the children. The children may buy and trim the tree, and so enjoy it for several days before the final time when parents and younger brothers and sisters come to share it with them.

January, February, March.

1. *Life in the community:* Occupations related to food, clothing, and shelter, represent both home and community activities in relation to each other; but the home life supplies the background in each case, and the several neighborhood industries become interesting in connection with some one or more needs of the home and family.

It is desirable, in addition to these, to emphasize the needs of and provision for the neighborhood or community as a whole. There are families, represented by the children themselves, living in their several homes; these homes are located on roads or streets; walks and street lights must be provided so that travel and transportation may be safe and comfortable. There are numerous stores and shops on the business street of the neighborhood which supply many of the needs of the community. Provision is made for the protection of the people by means of the fire department and the police service; and for communication through the work of the letter carriers and post office. There is the school for all of the children; and the church attended by the different families.

A miniature community as a project may be easily developed out of the building of individual houses on the same street or in the same neighborhood. These structures will be characteristic of the environment—single houses only, or single houses, blocks of houses, and apartment buildings. As the houses are completed, other necessary buildings of the community suggest themselves. The stores and shops of the miniature community may be distinguished from one another by their window displays. Sidewalks, street lights, mail boxes, and vehicles of various sorts may be added as need for them is felt. In the early spring the playground and park may become additional projects especially interesting and significant as the days grow warmer.

Associated with the construction are the plays in which the children carry out in imitative and imaginative form the various community activities. They play at shopping, visiting, going to school and church. They play postman, car driver, policeman, etc. They visit the fire department and see the firemen and engines. Illustrative drawing and modeling are other forms of expression used to interpret these different interesting and important phases of community life. The play is simple and the products crude, but they represent the child's mode of entering into the life of which he is a part and learning something of its interrelations and interdependencies.

These objective and relatively permanent representations of the objects and ideas involved in the subject matter hold the children's interest and attention for several days or weeks.

2. *Seasonal interests:* At Christmas time the use of the holly, mistletoe, and evergreens will call attention to the trees which keep their leaves all winter.

In winter, if environment favors, the children will make snow balls and snow men. The melting of the snow men will serve to show the change of snow to water under the effect of warm sunshine.

During the short winter days attention should be directed to the moon and stars while they are visible before the children's bedtime; and verse and song expressive of childlike feelings and interest in these heavenly bodies, may be used to deepen the children's pleasure in them.

The bulbs planted in the autumn may be brought from the cellar and kept in the classroom where the children may watch them grow and give them the care they need.

The planning and making of valentines will furnish good problems in construction and design, and this day, like Halloween, may be used to further the development of social spirit between the different grades in the school.

Washington's Birthday is a holiday which has interest and significance for the older children in the school and for the community in general. The younger children tend to reflect, without understanding, a community interest of this kind. They are, obviously, too young to appreciate the service of Washington to his country; but they will be satisfied with the explanation that he was a great soldier and the first president of the United States. They may help to celebrate his birthday by making suitable room decorations and soldier caps for themselves, by carrying flags while marching to martial music, and by hearing and joining in the singing of our national songs. Thus will pleasurable and right associations be made by them with the name of George Washington, a national figure too great to be introduced to children through anything so trivial as the commonly used cherry tree story.

April, May, June.

1. *The need and supply of clothing:* As occupations related to the supply of food may be initiated through suggestive toys, so interest in clothing and occupations necessary to supply it may be approached through dolls and doll plays. Dolls which need garments made of actual cloth materials may be used, or paper dolls, or both kinds; in any case the problem is one which will make a strong appeal to the children.

Material is the first necessity. The children may go to purchase it themselves. The planning and making of the garments will follow. This work will suggest the stores and shops again as places

where not only materials, but also ready-made garments may be secured. It may involve the dry goods store, or the department store, according to the circumstance and environment.

The plays and occupations will bring the children in contact with a variety of textile materials. With a few groups of children interest might carry back to the sources of wool and cotton, and the processes involved in converting the raw materials into fabrics. These processes are so interesting to the teacher that she often includes them in the kindergarten program when the children's experience does not justify such subject matter. All occupations related to clothing take on an added significance in connection with the out-of-door life of the season. When the subject is a part of the spring program, the need of cotton clothing, shade hats, sunbonnets, and parasols may be emphasized. If it is included in the winter work, heavy coats, caps, mittens, rubbers, and leggings are necessities to be provided. In either case, the merchant as a factor in supplying human needs becomes a person of special interest and importance.

2. *Seasonal activities and interests:* During the late spring and early summer, when the children can be out of doors much more than at any other time of the year, the central interest of the program may be selected from the activities and interests relating directly to the season of the year.

The playgrounds and parks are being made ready for summer use. As suggested elsewhere, the representation of a playground or park in miniature may be the final project of the work growing out of the interests in community life.

In the early spring, the effect of sunshine on seeds and bulbs planted in the window boxes will have been noted. Excursions will be planned in order that the children may discover signs of new life as they appear in the grass, leaf buds, and early wild flowers. Interest in these may be stimulated through drawing and paper cutting as well as through language and poetry.

Observation of returning birds should be encouraged and an effort made through pictures, conversation, drawing, etc., to help the children recognize readily a few birds common to the locality. The children may also make a bath for birds in the school yard and keep it filled with water.

The out-of-door experiences will supply motive for construction. Paper hats or sunbonnets will be needed to shade the children from the heat of the sun; baskets for collecting flowers; and clay bowls or vases for holding the gathered flowers.

As the older boys and girls are playing with marbles, tops, and kites, the little children may make these or similar toys to play with on bright or windy days.

In addition to these experiences incidental to the objects and phenomena of nature, the activities of gardening and the care of animals should be carried on. Children of kindergarten age are too young to carry gardening activities very far. They should, however, have the opportunity to plant some flower and vegetable seeds which will mature quickly. Seeds planted in pots, bowls, or boxes made or decorated by the children will help to keep the interest active through appeal to the ownership instinct. Furthermore, the plant growing in the little pot on the window sill is much more in evidence than the plants growing in the relatively remote garden in the school grounds. It is worth while, therefore, to plant seeds in the spring and bulbs in the autumn, both indoors and out. Lettuce and radishes planted early in May will be ready to harvest by the time school closes in June. The seeds of these and other plants may be gathered in the early autumn. In case there is a garden belonging to the school in charge of a capable garden teacher, the kindergarten children may help in planting and caring for it.

Animals which are interesting in their habits and which may be easily cared for in or near the schoolroom are gold fish, canary birds, ring doves, rabbits, and a hen and chicks. In a number of instances kindergartners have succeeded in raising a brood of little chicks. In one school the hen and fertile eggs were brought to the classroom. The children made a nest of straw in a barrel turned on its side, placed the eggs in it, and fed the hen daily while she was setting. When the eggs hatched, some of the children saw the little chicks actually coming out of the shell. One morning they heard the peep of one chick still inside the shell. After all were hatched, the children made a runway with large blocks. The hen and her brood were kept in the schoolroom for several weeks, the children giving them the necessary care during that time. Later, they were kept in a coop out of doors. In the course of time the mother hen began laying eggs again, and these were used for the closing party of the year when the children served their mothers a luncheon of lettuce and egg sandwiches and radishes, the lettuce and radishes having been gathered from their own gardens.

Opportunity thus to become intimately acquainted with two or three types of animal life is far more important for the children than merely to be introduced to a larger number and variety of animals, although the aspect of number and variety need not be neglected.

The festival days of the season, Easter and May Day, should be recognized in appropriate fashion. Since Easter comes at the beginning of spring, the associations with it should be those of new life. The season is one of promise.

May Day, like St. Valentine's Day, is a time for surprises. It should be so celebrated as to give pleasure to friends and neighbors.

The old custom of hanging baskets of flowers on neighbors' doors is a charming one to perpetuate. The schoolroom doors serve as well as any others for this purpose.

ATTAINMENTS.

The attainments are realized so largely in terms of the various activities of the program, handwork, language, drawing, excursions, and so on, that it is difficult to formulate them apart from these several activities except in very general terms. A year's work as outlined below should result in the following values for the children:

1. *Attitudes, interests, tastes:* A broader and more intelligent interest in those phases of social and natural environment included in the content of the curriculum.

An eager receptive attitude toward new experience resulting in the development of new interests.

2. *Habits, skills:* Increased ability to relate and organize experience.

Increased ability to adjust oneself to social situations.

Increased power of attention shown in ability to concentrate on a series of related ideas and activities.

Increased power to think and work independently.

3. *Knowledge, information:* A considerable fund of valuable information concerning the home and neighborhood activities and natural objects and phenomena to which attention has been drawn.

Some realization of the social relationships and moral values involved in certain of these activities.

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Chapter III.

MANUAL ACTIVITIES.

The impulse to experiment with materials is one of the strongest of early childhood. It shows itself first in the mere handling of objects and materials for the pleasurable sensations which result. Each material, according to its nature, offers suggestions to which the child reacts and thereby discovers further characteristics and possibilities of the particular object or material. Soon the child begins to use material to make objects or express ideas of his own.

GENERAL AIMS.

To stimulate a feeling of power which comes from control over environment.

To develop energy, resourcefulness, and persistence in realizing a purpose.

To give means of control over surroundings and means of interpreting processes.

SPECIFIC AIMS.

To satisfy the child's desire to experiment with materials and thus become familiar with their properties.

To help the child take the initial steps in art and industrial processes.

To develop ability to work with others toward common ends.

SUBJECT MATTER.

Children of 4 years of age who have had a variety of well-selected toys and play materials in the home will begin very early to use the materials of the kindergarten in imitative and constructive play. Less fortunate children will need a greater variety of suggestive toys to stimulate the underfed play and constructive instincts. For example, a child from a home of the first type will be interested almost at once to make a bed and chair for himself or for a doll with the blocks he finds in the school, while the other type of child will need time to play with a doll, a toy bed and chair, and also time to experiment with the blocks as suggested above.

Much of the children's natural constructive play with materials is an outgrowth of their attempt to imitate or reproduce the familiar adult activities going on about them. The toys listed below have been found of value in creating for the children in the kindergarten suggestive social situations leading to play representative of home and neighborhood activities and giving natural and childlike motives for construction.

Toys: Dolls, large and small; doll furniture; a playhouse; toy utensils; toy animals.

Dolls, large and small, appeal at once to the child and represent to him members of the human family with needs which must be satisfied. Many of the problems throughout the year will arise from providing for the dolls a house, furniture, wagon, train, station, clothes, food, etc. As the children provide for the needs of the doll family, they become more conscious of the ways in which their own families have been provided with these necessities. Work and play become more purposeful and are entered into with more zest if each child has his own small doll to build for, to sew for, etc.

Doll furniture, beds, chairs, tables, bureaus, cupboards, and carts can be made by the children as described in the section on wood work.

A playhouse may consist of a screen with windows and a hinged door, to be used in one corner of the room. While not a necessary part of the equipment, this furnishes an excellent motive for house-keeping plays and construction.

Toy utensils encourage plays related to home life, and suggest to the children ideas for construction.

Toy animals suggest the need of shelters, inclosures, food, etc., and thus supply motive for construction and material for play.

Materials for construction: Blocks, sand table, clay, paper, textiles for weaving, textiles for sewing, wood, miscellaneous materials.

Blocks may consist of Froebel's building blocks enlarged, large floor blocks in the form and relative proportion of the Froebelian building blocks but enlarged six times, and boards of different dimensions to be combined with these; or the Patty Hill floor blocks and boards can be made to order by a planing mill or the school manual training department. Maple or other hard wood should be used.

Much of the construction with this material is done upon the floor in order that the children may have more freedom and that the larger muscles may be called into play. The floor should be kept clean and the children should be provided with small individual rugs or mats. Cardboard can be furnished for roofs with the Froebelian blocks, and boards with the floor blocks when the children feel the need for them.

At first the children experiment freely with their material, discovering for themselves what can be done with it. They soon begin to set

for themselves problems which may have been suggested by their discoveries of the possibilities of the material. For example, they may pile the blocks to make towers, or they may lay sidewalks, or construct trains of cars or houses; or their construction may be in line with some present interest or past experience. One child may build with cubes and oblong prisms a porch and steps like those which are just being added to his own home, while a second child may construct the long table and benches in the grove where he had his picnic supper the evening before. The social situation created by the presence of the kindergarten dolls and the dishes may suggest the use of the blocks to make chairs, tables, stoves, beds, etc., and housekeeping plays develop which may continue for several days, improvements being made and equipment added in the way of napkins, table spreads, bedding, brooms, etc., as the children feel the need for them. At times each child will build to carry out his own ideas in his own way; again, two or more children will unite their blocks and cooperate voluntarily to solve a problem; while at other times a group of children will cooperate to solve a larger social project chosen by themselves or suggested by the teacher. When the teacher sees an interest growing in any problem which she wishes especially to emphasize in her program, she seeks to center the interest of all the children upon it. For example, when a number of children become interested in the housekeeping plays, she brings out the screen playhouse to give a stronger motive for construction and to make the situation more real and interesting. She may then suggest problems which will carry forward the play.

Some of the projects for construction with blocks arising out of the subject matter of the program are: Furnishing a house in the play corner; building the grocery store.

The grocery store may first be made an individual project, each child building with Froebelian blocks counters and shelves, adding cans of fruit and vegetables and glasses of jelly represented by cylinders of the beads, large and small. Objects constructed of other materials may also be added to make the equipment complete. Later, the group may combine efforts to produce a store large enough for several children to enter at once, using the large floor blocks and boards for counters and shelves and the cylinders for cans of fruits and vegetables. Other material may be used with the blocks as the representation and play are carried forward and as the children discover a need for them. Real fruit, vegetables, and grains may be used, or clay fruit and vegetables may be made and painted, and boxes and baskets constructed to hold these. Money may be made, a pocketbook to carry it in, and a delivery wagon for the goods. At the approach of the Christmas season the grocery store will be transformed into a toy shop and decorated and equipped by the children

with a large variety of toys of their own construction. In the spring the need for new clothing may lead to the building and equipping of a dry goods or department store.

Another project is laying out the farm, building fences, constructing the farm buildings, such as the farmer's house, the barn, the shed, the chicken house. While the children are interested in the source of their food, an excursion will be made to a farm if it can be provided for. The morning will be spent in playing in the hay, feeding the chickens, and getting as much valuable and happy farm experience as possible. On the following day, in the kindergarten, the toy farm animals may be brought out and the children may build with their blocks to provide the animals with proper shelter, water troughs, and barnyards. Fields, gardens, and perhaps an orchard will be laid out and fenced in, and gradually a miniature farm will develop in the sand table or in one corner of the room. Here, as in the grocery store, other materials may be combined with the blocks to complete the project. If the excursion to the farm is not possible and if a farm visit has not been a part of the experience of the individual children, less time will be spent upon the problem, and only those phases of it will be reproduced in manual activity which seem most interesting and closest to the children's experience; for example, the construction of the farmer's wagon which they see bringing the produce into the grocery store, building a shelter for the toy animals, providing for feeding and watering the toy animals.

The construction of typical and familiar buildings in the community has interest and meaning for the children because such buildings serve their homes. First, houses are built similar to those in which these particular children live or with which they are familiar. These individual houses are later arranged along a street; and sidewalks, street cars, street lights, and mail boxes are provided to unite or serve these homes. Typical stores with which the children are most familiar are built into a business block. Street cars, delivery wagons, and automobiles are constructed to provide transportation. Familiar public buildings, such as the school, the church, the post office, the library, the fire department, the railroad station, etc., are next studied and built in appropriate form. Thus in one corner of the room a miniature community grows step by step.

No formal work is done with this material. For the most part it is the uses, the purposes, the functions of things and their parts which interest children at this time. There are mathematical values in the building material, and through the children's varied experiences in handling it they are laying the foundation for later discrimination of form, size, number, and arrangement of parts. The teacher, however, will not stress the formal aspect of the material, but whenever

a child reaches out spontaneously for some mathematical value, she will satisfy this need. In addition to this interest in mathematics, which is not uncommon in young children, a child naturally gains some knowledge of mathematical values when form, size, number, and arrangement become conscious factors in carrying out a project which he has himself initiated. For example, if, in building, a child exhausts his supply of oblong prisms and asks for more, the teacher may suggest that he has before him blocks with which he can make more oblong prisms. Because of his need for the blocks, the child will be interested in discovering that two long square prisms or two short square prisms may be so arranged as to make an oblong prism.

A sand table with shells, pebbles, tin or granite dishes, etc., is a valuable item of equipment. Children will first experiment in the sand, setting their own play problems, patting, piling, sifting, digging, stirring; making hills, caves, tunnels, rivers, and wells, or cakes and cookies. Later, as children become interested in cooperating, group problems are carried out in the sand table. The farm with its buildings, fields, and gardens; the school playground; the park; a house, garden, and garage; "our" street or typical buildings in "our" town or neighborhood are problems suggested by the subject matter of the program which are solved in the sand table. Constructions are made of blocks or paper; people and animals are cut from paper or molded from clay; trees are represented by twigs or made from paper. Plans are simple, and are made and carried out by the children. The teacher, by her questions, helps the children to think their plans through and to organize; but the working out is the result of their own initiative rather than of the dictation of the teacher.

Clay, because of its plasticity and ready response to the children's touch, may be used successfully for the shaping of many forms. Experimental play, beginning with patting, pinching, rolling, making holes, is carried over through some suggestion which grows out of the child's first aimless handling of material into the conscious working out of ideas, the making of cakes and pies, dishes, dolls, or balls. A few of the objects which may be worked out with clay in connection with the content of the curriculum are: Bread, cake, and pies for baking; dishes and cooking utensils; fruit and vegetables made and painted for the farmer's wagon, the grocery store, or the Thanksgiving table; animals and figures of people for various play projects; nuts and squirrels; Christmas toys for the toy shop or for Santa Claus to leave by the fireplace; a candlestick or paper weight to be enameled for a Christmas gift for mother or father; flower bowls; flower pots to be painted, covered with shellac and used for the planting of seeds in the spring; bird nests and birds; and marbles to be painted and

covered with shellac for actual play. Clay may occasionally be used for the illustration of a story, for example, the Three Bears.

Paper for construction is one of the most valuable materials in the kindergarten because of the variety of possibilities which its use affords. It must be tough, pliable, and of good color, and the objects produced must be simple and in line with the children's interest.

Before construction can be undertaken, control of the scissors should be gained. The first cutting will be making little snips, which can be used to fill a pillow for the dolls; paper may be fringed for rugs and table runners for the playhouse; table spread, rugs, and bedding may be cut, and napkins cut and folded for the playhouse. By this time the children should have sufficient control of the scissors to cut successfully from the magazines pictures with straight edges. This calls for a scrapbook, and folding the pages and cover of the book follows. Later problems will be making baskets for gathering seeds from the garden; tins for baking; boxes, baskets, bags for the grocery store; baskets, lanterns, cornucopias, and bells for the Christmas tree; toys for the toy shop; envelopes for valentines; kites, pinwheels, fans, parasols for use in the spring; paper dolls, with their wardrobes, and a suit case or trunk to hold the clothes; furniture for the doll house made by the group, or for the single room made from a box and furnished completely by the individual child. Paper construction may be used instead of blocks for representing in the sand table or on the floor a farm, street, or community, which calls for the construction of houses, barns, stores, churches, and other public buildings, as well as wagons, street cars, automobiles, fences, etc.

Many of the problems suggested, such as the book, basket, box, fan, lantern, doll dress, and rug, furnish excellent opportunities for applied design.

The method followed with paper construction is similar to that used with other materials. The first steps are experimental; ideas and problems grow out of this experimentation, and the children improve their products as they test them out or follow the suggestions of other children or the teacher. Later the teacher helps the children evolve forms which are more satisfactory, making sure always that the process suggested is in line with the children's own thinking and stage of progress.

Textiles and tools for weaving include looms of wood or cardboard made by the older children, cotton roving, eight-ply worsted, jute, cotton cloth brought from home by children or teacher and dyed in attractive colors with diamond or easy dyes, and cut into wide strips. Children may make their looms of wood or strawboard and set up the warp with little difficulty. Suitable problems for weaving are rugs for the doll house, hammocks, caps, and muffs for the dolls.

Paper-mat weaving, because of the frailty of the material, the difficulty of handling it, and the unsatisfactory results obtained, has been discarded in many places in favor of larger and more durable materials and a process more closely related to industrial weaving. These materials are not only more easily handled by the children, but the results produced are of greater value in their eyes because they are of use in their play life. However, because of the prolonged effort which the accomplishment of the result demands, and the accuracy which is required in the process, even the industrial type of weaving should be used only to a limited extent and with the older children.

Textiles for sewing include cotton and woolen cloth, zephyr, mercerized cotton, heavy thread, large needles.

Sewing cards have been discarded by many kindergartners. It is felt that there are more plastic and satisfactory mediums through which the child may express his ideas. However, sewing upon construction paper is occasionally introduced for the production of articles which can be used by the child; for example, a pocketbook for the store play, a postman's bag, etc. The simple overhand stitch is used. Like weaving, sewing is used only to a limited extent, since, although interesting to the kindergarten child, it calls into play the finer muscular coordinations. The materials should be coarse, in order to secure large, crude work. The needs of the kindergarten dolls furnish a most natural and interesting motive. Woolen dresses, wraps, and bedding must be provided so that the dolls may be made ready for winter, and in the spring cotton clothes and sun hats are required. Children are often able to bring from home scraps of woolen or cotton cloth left over from the making of their own clothes. Their first attempts at dressmaking are purely experimental; little shaping is given to the material, the dresses often being sewed upon the dolls with large, coarse stitches. Results are compared, suggestions are made by children and teacher, and other attempts follow with a gradual improvement in results as a consciousness of better form develops. Soon a need is felt for a pattern, and this is worked out by the children for a simple two-seam dress.

Sewing, like weaving, is an occupation valuable for the more mature children.

Wood for construction should include odds and ends of soft wood; pieces of wood cut in various sizes and shapes; nails; glue; hammer; saw; and bench hook.

At first the children experiment with tools, using odds and ends of boards. They are often satisfied with merely pounding and sawing until they have gained some degree of control over these processes. Then they begin to assemble pieces of wood, making simple objects which are often suggested by the shape of the pieces. Later, ma-

terial cut in appropriate dimensions for making objects in which the children are interested at that time, are placed in a box; the children's problem is to select the pieces which are best adapted to their individual purposes, and to fit and nail these together. Occasionally the children measure and saw a board to meet their need. Care should be taken to select wood that is soft, such as bass and white pine; but the pieces must not be so thin as to split easily.

The curriculum suggests some suitable problems to be solved with this material. They are: Simple furniture for the large dolls; smaller furniture for the doll houses which the children make for themselves from wooden boxes; a cart for the dolls; a wagon for the grocery store or farm; toys for the Christmas toy shop; equipment for the miniature playground or park; bird houses; and boxes for spring planting. Many of these objects are painted or stained by the children. The results are crude, but they make most satisfactory and durable toys.

Miscellaneous materials, such as wooden and pasteboard boxes of various sizes, spools, ribbon bolts, corrugated paper, milk-bottle stoppers, collar buttons, etc., offer suggestive and inexpensive material for the construction of articles for house or store play, or toys and articles of use. Work with this material tends to make children resourceful and to suggest to them the use of odds and ends of material for home construction. With this as with all other material, the teacher must realize that the objects made must necessarily be simple and crude. The test of the educative value of the work accomplished does not lie in the completed article, but in the power which the children gain in thinking and working independently. The teacher must guard against letting her ambition to get results lead her into giving too much assistance to the children.

Supplementary materials: Enlarged sticks of various lengths; beads; enlarged peg boards.

The enlarged sticks are rarely used for picture making. Better mediums through which the child can express his ideas of objects about him are furnished by the more plastic occupations, drawing and cutting. The sticks are useful, however, in combination with blocks and other material for constructive plays; for example, for representing street car tracks, sidewalks, etc., and in combination with large beads for making fences, lamp posts, etc. They may also sometimes be combined with coffee beans and other large seeds for making designs, as a conscious preparation for the decoration of some object which has been constructed. The children may experiment with arrangement, and select their best design to be reproduced with stick dyes, crayons, or paints, for the purpose of decorating wall paper, rugs, table covers for the doll house, and books or other objects of interest.

Beads in the form of spheres, cubes, and cylinders of one-half inch and one inch in diameter are included in the material.

Bead stringing, which is particularly suitable for the younger children, will at first be experimental; then simple arrangements will grow out of the children's experimentation, leading step by step to varied forms of organization and rhythmic arrangement as the children or teacher may suggest. Nature materials, such as red haws, rose hips, large berries, beans, acorns, and other large seeds of various kinds, may also be strung, sometimes with straws or hollow rushes cut into short lengths.

Enlarged peg boards call for experimental activity which usually leads soon to some kind of organization. Children often inclose a space with pegs of one color and ask for the toy animals in order to use the space as a pasture fenced in; or they arrange the pegs as flowers and have a garden; or instead of expressing ideas they merely make rhythmic arrangements which satisfy their sense of beauty. The pegs, like the beads, furnish a material which appeals to the children's delight in color, and affords opportunity for a pleasing variety of arrangements.

METHOD.

Experimentation with materials to discover their characteristics, properties, and possible uses.—Children come to all new materials with a questioning attitude. Curious and eager to gain knowledge of and control over their environment, they find for a time the mastery of material an absorbing problem. The teacher should not hurry the children through this period of experimentation, for what they learn by direct inquiry is of greater value to them than what they are told by another, even though a longer time and greater effort are required for the learning process. If the materials are wisely chosen and hence adapted to the present needs and interests of the children, they should hold the interest for a time without the presence or efforts of the teacher. While the children are thus experimenting, however, a teacher who has a thorough knowledge of her children and of materials may direct their activities in the following ways:

1. Study each individual child, making note of his choice of materials and problems, his natural ways of working, and rate of progress, in order to make suggestions and later set problems which are suited to his needs.
2. Guide the children's interests and uses of materials to prevent them from becoming habitually trivial.
3. Help the children to organize their experiments so that these will be useful and will lead constantly to higher stages of development.

Solving problems through the use of materials.—Educators are to-day seeking to develop in children initiative and reflective thinking. The first prerequisite of productive thinking is a problem which seems to the child real and worthy of solution.

1. Problems initiated by the children: Experience has shown that children are often capable of setting for themselves worthy problems, the suggestions for which may come from these sources:

- (a) Ideas may grow out of the children's handling of material. Problems are suggested and formulated because of discoveries of the possibilities of material.
- (b) The children may formulate problems suggested by some present interest or some past experience which may be related to the subject matter of the curriculum.
- (c) The children may formulate problems to meet needs created by some social situation in the kindergarten. These too, will often be suggested by the content of the curriculum.

2. Problems suggested by the teacher: The teacher will receive many suggestions for problems from watching the children during their free play periods with material, and will select those problems which children show an interest in working out or for which they feel a need. Other problems may grow out of some social situation, or be in line with some seasonal interest; in other words, may be derived from the subject matter of the curriculum.

These problems, suggested by the teacher, must be so in line with the interests, needs, and experiences of the group that the children will adopt them readily as their own, and they must seem to the children real and worth the solving in order to produce good, productive thinking and interested effort.

Imitation of another's choice or use of material, selection of another's problem or method of solving it.—Children are highly imitative and often adopt, as their own, another's use of material, or solution of a problem if it appeals to them as better than their own. Such spontaneous imitation enriches the children's ideas and experiences, and often results in clarifying their vague and confused images. Imitation which helps children to do in a more effectual way what they are already struggling to do, and which leads to later independent action on a higher plane, is a valuable agent of education. If the teacher makes a suggestion for a more satisfactory solution of a problem or sets a pattern for imitation, she must make sure that it is in line with the children's mode of thinking and stage of development. For if the teacher's contribution is not related to the needs of the children, they may follow the suggestion for the moment, but it produces no effect upon their later work unless it is to make them dissatisfied with their own crude products.

Imitation is often used when the problem is one of technique, a better way of holding the scissors or using the hammer; but when the problem is one of expressing ideas the children should, in the main, be left free to try this or that method and to select the one which works, since this is a necessary condition governing the thinking process.

These methods will be found valuable even in kindergartens equipped with only the traditional material. The larger units of work and the problem method may be used to advantage in all kindergartens.

ATTAINMENTS.

1. *Attitudes, interests, tastes*: Readiness to attack simple problems in construction, and faith in power to solve them.

Increased interest in the products of construction leading to more purposeful work and effort to secure better form.

Development of the social spirit resulting from cooperative effort toward common ends.

2. *Habits, skills*: Increased control of the materials and tools which have been used.

Ability to select suitable material and construct without help a number of simple objects of the kind indicated in the foregoing pages.

3. *Knowledge, information*: Acquaintance with the properties of a variety of objects and materials.

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Chapter IV.

ART.

Children need only to be supplied with paper and scissors, crayons, paints, or clay to prove that the desire for expression is inherent. When the crude results are explained to the onlooker, one does not feel that the "creative imagination" needs to be developed. But scribbling and snipping, daubing and pounding may be gradually transformed into better technique through the child's own experimental method and through suggestions from the other children and the teacher. Symbolic representation may approach more and more to the semblance of objects in the child's environment. It is a delicate task, however, to improve a child's technique and to make his illustrations more true to life without losing the freshness and originality of the more spontaneous expression. Some educators would say "hands off," and assure us that the child will work out his own salvation in art training. While this view may be extreme, it is well to remember that too much emphasis upon technique clips the wings of creative imagination, and too much emphasis upon the expression of clear ideas quenches the desire for expression. There must be periods when the child works "for the joy that is in him, in his own particular star."

GENERAL AIMS.

To satisfy the desire for expression and to develop the creative imagination.

To develop a feeling for color and arrangement.

To clarify thought.

To enable the child to see beauty in nature and in works of art from a new point of view, because he has tried to express himself through art mediums.

SPECIFIC AIMS.

To gain better control of the medium.

To see objects more clearly and to express thought more definitely.

To use color and arrangement more consciously.

SUBJECT MATTER.

1. The experience of the children in their relationship to nature and to human beings as organized in the kindergarten curriculum

offers a great variety of subjects for expression. This expression may find definite and beautiful form in relation to the celebration of the festivals.

- (a) Nature: Berries, flowers, fruits, trees, sun, moon, animals, children's play in different seasons.
- (b) Industries and occupations: Families and associated objects, such as houses, utensils, etc.; activities of workers in various occupations.

2. The celebration of Halloween, Christmas, Washington's Birthday, Easter, and May Day offers suggestions for room decoration in rhythmic arrangement. The making and decorating of invitations to parties, of Christmas cards and Easter cards, valentines, plates for the Thanksgiving party, many kinds of baskets, give abundant opportunity for motivating the art work. When patterns are given to the children to provide units for arrangement in this kind of work there is no art value unless the teacher has definite art standards in selecting the patterns, and unless the units provide some opportunity for variety in arrangement, so that the children may use this work as a means of self-expression.

3. Books may be made throughout the year containing pictures in crayon, water color, and paper cutting, with typewritten stories or verses composed by the kindergarten children. The pictures may be made first, and the words describe the picture, or vice versa. The following verses are typical of a kindergarten child's composition:

The moon sees
Two Christmas trees.

Three pumpkins in a row,
The farmer made them grow.

Mary ate a berry,
And changed into a fairy.

These books serve as summaries of certain phases of the program, such as a farm book or garden book; a Santa Claus book; a book of seasons; a book of mother's work or work in the home.

The content of these books gives opportunity for valuable correlation between language and drawing. Decorating the cover gives a motive for design, and putting the book together furnishes an industrial project.

4. Furnishing a doll house and dressing paper dolls involve many art projects as suggested in the chapter on Manual Activities.

5. Stories and rhymes may offer suggestion for illustration, but kindergarten children should not be expected to picture objects which they do not use freely in their more imaginative drawing, nor should they be expected to represent a plot that involves the relationship of too many ideas. For instance, the story of the Three Pigs would

require the picturing of two kinds of animals, three houses built of different materials, a churn, an apple orchard, etc.; and the plot is quite involved in the relation of each episode to the climax of the story. Some of the simple songs or rhymes are better for illustration. Humpty Dumpty, for instance, is very easy to draw, because Humpty Dumpty is just the kind of creature that the child draws, the type "man" with which all teachers of little children are familiar.

A direct experience, like an excursion, furnishes suggestive material for illustration. Many times the children draw pictures of themselves in long lines with "teacher," a towering individual, dominating the group. The objective of the excursion has been omitted. It matters not whether it may have been a fire engine or an art museum, the social side of the experience has made the deepest impression. But, after all, this is the true nature of art, the graphic expression of a vivid experience.

There is such a wealth of suggestion in the kindergarten curriculum that it is never necessary to improve technique apart from the children's interest in manipulating materials or in expressing ideas. The work should always be motivated; "drill" lessons, such as filling in squares with color, are valueless.

METHOD IN RELATION TO GENERAL AIMS.

To satisfy the desire for expression and to develop the creative imagination.—Opportunity should be given for free expression with paper and scissors, crayons, paints, and clay. The first expression of children is from the image and not from the object. As John Dewey¹ says:

Even in drawing objects the child will draw from his image, not from the object itself. As soon as the child has acquired the habit of vivifying and liberating his image through expression, then a return may take place to the original form. In one sense there is no technique up to this time, but there is the psychological factor corresponding to technique, the motor expression, its coordination with, control by, and stimulation of the visible image. This becomes through training what is ordinarily called technique. The first consideration is the doing, the use; after use comes method, the *how* of doing. Now, method must exist not for its own sake but for better self-expression, fuller and more interesting doing. Hence these two points; technique must grow out of free imaginative expression, and it must grow up within and come into such imaginative expression.

To develop a feeling for color and arrangement.—1. Color: A child's love of color should be satisfied by giving him colored materials with which to express himself; crayons, water colors, and colored papers. It is better for kindergarten children to use colored crayons rather than pencils, because they satisfy the sense of color

¹ Dewey, John. *The Psychology of Drawing.*

and at the same time give broader, softer lines than the pencil. The first expression of the children should be free, even if the color combinations are crude. More esthetic shades and tints should not be given the child until he has satisfied to some extent his love for the more brilliant colors. He often makes barbaric combinations which are as unconsciously beautiful as primitive art. While these results may be at first accidental, through emphasis and selection by the teacher, they may form the basis for more conscious control on the part of the child.

The teacher may influence the results, as the child becomes more familiar with the medium, by supplying backgrounds of a neutral or harmonious shade upon which the work is applied, and by occasionally limiting the choice of colors.

2. Arrangement: In the free work of children we find many examples of unconscious arrangement; for instance, a child makes a succession of stars and moons across the top of the paper instead of drawing a literal representation of a night scene. This interest in arrangement may be developed and made more intelligent by supplying motives for design in the decoration of the kindergarten room, and by decorating baskets, plates, paper-doll dresses, etc., which furnish shapes so suggestive for design.

The use of materials which naturally lend themselves to the repetition of a unit or to orderly arrangement rather than to illustration, such as peg boards, bead stringing, stringing nature materials, all develop interest in design.

To clarify thought.—In general, all expression objectifies ideas, and so tends to clarify thought. However, if the teacher does not regard the results that the child attains as worth while, and if she fails to provide opportunity for motivation of work, the quality of the results will not improve and will most likely deteriorate. Too often teachers impose devices upon the children in the form of results which may have been suggested by an exhibit of kindergarten work, or by a visit to another kindergarten. These "results" have no value in themselves, but only as they represent a working out of a problem which is vital to the group concerned. Motive in work makes expression grow in intelligence. Problems of "how" or "what" constantly arise in the child's experimentation, and should be made more clear by the teacher. The more instinctive activity characteristic of the first use of the material becomes transformed into a process that demands clear thinking. "Imitation of the teacher's copy" used too frequently in art work with kindergarten and elementary school children encourages the child to mechanically repeat the result which the teacher has thought out, and not to think his way through the process, which is one of the chief values in any kind of expression.

To develop appreciation.—Activity is the child's key to knowledge. He likes flowers because he can pick them, but when he has represented their bright colors, the activity involved in the process of making a picture gives him a new attitude toward the object. The interest in the art result because it is the child's own project carries over to an interest in the object and so brings about a more intellectual attitude as a basis for the next effort. This objectifying of experience makes other people's pictures more interesting to the child. This is one approach to picture appreciation.

METHOD IN RELATION TO SPECIFIC AIMS.

To gain better control of the medium.—The first interest in any material is in manipulation; results are secondary. As has been suggested, scribbling may be developed into firm lines and smooth rubbing on of color; daubing and scrubbing may be changed into the application of washes. When children have passed out of the experimental stage and have the ability to secure better results in technique, they may criticize their own results and those of the class. One child said frankly that the water in a picture "looked like mussed up hair," realizing that the lines might have been kept parallel.

When children draw, they seem instinctively to use line instead of mass drawing, but as rubbing on of color strengthens technique, mass drawing may be suggested in connection with line drawing. For instance, boats are drawn in outline, but the water is rubbed in. Soldiers or sailors may be drawn unsubstantial and stick-like, but uniforms are suggested, and again there is need for broad, smooth strokes. A book filled with illustrations may have a cover decorated with units in massed color.

When there is group instruction in art work, the children should be classified by their ability in using a particular medium, and not by age or the length of time they have been in the kindergarten. In this way, the children who are still in the experimental stage will work very freely with the medium, while those who are tending to repeat themselves, or who desire a better form of expression, may have the benefit of instruction.

To see objects more clearly and to express thought more definitely.—Many children of kindergarten age are too immature to draw from objects and should first live through the more imaginative stage of art expression. There are some children of kindergarten age, however, who can draw with a considerable degree of accuracy and a grasp of details. They are able to study a flag and to reproduce it in the right colors and with the right relationship of the field to the staff and of the stripes to the field. Children in this stage of development can draw clocks with some sense of proportion, and they show their ma-

turity by making some kind of symbol around the face of the clock instead of merely making marks as do the young children. This kind of drawing would seem to have some relation to the ability to write. It is also the beginning of mechanical drawing and the drawing of still life. It should never take the place of the more imaginative drawing, but there are subjects in the kindergarten curriculum which lend themselves to this form of expression, such as the drawing of trains, houses, etc. In the spring, branches of pussywillows, wild flowers, and hyacinths that the children have planted may be drawn with some regard to correct form and color. When children, however, look indifferently at the spray to be drawn and then make a flower growing out of the ground, and even use green and red indiscriminately for flower or stem, they are not in the stage to draw from an object. A group of children whose teacher had given them a spray of bitter-sweet to study and represent, merely took the berries as a suggestion and worked out a variety of arrangement in spots and lines which were very decorative but which merely suggested the berry and had no resemblance to the actual growth.

To use color and arrangement more consciously.—As was suggested in a previous section, providing a motive tends to make the work more thoughtful. For instance, the younger children scatter all kinds of objects over a page with no thought of selection or arrangement. To make a book with a picture on each page brings about orderliness of thought and arrangement. When the subject matter of the curriculum has made thought more clear, the children's illustrations will reflect this quality, and the teacher's emphasis will be along the lines of the relationship among objects in a picture.

When the problem is a decorative rather than an illustrative one, the objects to be decorated will control the use of appropriate color and design; for example, orange and brown at Halloween and red and green at Christmas time applied to plates, baskets, and other objects associated with the festivals. The doll house presents excellent problems in combinations of harmonious color and design applied to wall paper, rugs, etc.

ATTAINMENTS.

1. *Attitudes, interests, tastes:* Eagerness and willingness to express ideas and emotions through the mediums of graphic art. More intelligent interest in pictures. Feeling for color, form, and arrangement.

2. *Habits, skills:* Orderly habits in using materials. Ability to handle art mediums with some degree of skill.

3. *Knowledge, information:* Some idea of form in relation to expressing thought to others. Clearer idea of subject matter in the curriculum through having expressed thought through art mediuma.

Chapter V.

LANGUAGE.

In language, the wealth of learning and aspiration of the race have been stored up, ready to be unlocked when the child has found the key of some actual experience which will give him the power to enter into his inheritance. Words are symbols; that is, they suggest and represent meanings. John Dewey says:

They stand for these meanings to any individual only when he has had experience of some situation to which these meanings are actually relevant. * * * To attempt to give a meaning through a word alone without any dealing with a thing is to deprive the word of intelligible signification. * * * There is a tendency to assume that whenever there is a definite word or form of speech there is also a definite idea; while, as a matter of fact, adults and children alike are capable of using even precise, verbal formulæ with only the vaguest and most confused sense of what they mean. * * * Words should be signs of ideas, and ideas spring from experience.

GENERAL AIMS.

To provide a means of communicating with others.—The kindergarten period is the one during which a child should become thoroughly grounded in colloquial, conversational English. He should gain in the ability to grasp the meanings of others as interpreted in language.

To aid in the clarification of ideas; to crystallize a meaning which the child has discovered in his experiencing, so that such meaning may be used in thinking.—As the child realizes finer distinctions in his experience, he seeks for a word that will fix his idea. If it is supplied to him or if he coins one for the situation, he can make easy reference to that situation in his later thoughts; the word gives him a new basis for discrimination.

SPECIFIC AIMS.

Improvement of the technique of oral expression.—Increase of vocabulary due to wider experiences and finer distinctions.

Better grammatical construction, sentences more complete and following each other in sequence without loss of spontaneity in expression.

Clearer enunciation; correct pronunciation; pleasing, expressive tone of voice.

Organization of thought.—In striving for adequate expression of his ideas a child learns to emphasize the more significant phases of his experience and to relate these to his former experiences and to define them in terms of former experiences. In social intercourse he interprets the thoughts and feelings of others in the light of his own, and so enlarges and modifies his own.

Freedom of expression.—A child should be led to feel that he has something to say which is worth saying. A child should be led to feel that he has an interested listener. A child should be led to feel that he will be encouraged to communicate his ideas.

SUBJECT MATTER.¹

Conversation, stories, rhymes, and singing occupy a large portion of the time in the kindergarten. These will vary in different localities. Real conversation, a give-and-take between equals, must be based upon topics of common interest; therefore subjects of conversation will vary in different kindergartens, because the environments and experiences of the children will be different. The form that language development will take will also vary somewhat in the kindergartens. Where there are only foreign-born children, English must be taught as a new language, and only the simplest stories and songs can be used, accompanied by much gesture, repetition, and illustration.

The subject matter divides itself into two general lines.

1. *The experiences of the kindergarten:* These supply the most vital subject matter for oral expression, and relate to activities and materials. The toys, pictures, stories, games, excursions demand continual suggestions, questions, explanations, and comments.

2. *The experiences of individuals:* The experiences of individuals, either children or teacher, outside of the kindergarten, if they are significant socially, provide occasions for the introduction of subject matter from a wider field than the immediate kindergarten experiences. Stories and pictures often serve the same purpose.

Topics of conversation suggested by the subject matter of the curriculum are as follows: How to make clothes for the doll; cleaning and dusting the kindergarten room; materials needed for making jelly; the care of the kindergarten animals, how they move and eat; planning the Thanksgiving celebration; a visit to the blacksmith; best ways to plant bulbs and seeds; appropriate decoration of the room for Washington's Birthday; the first spring flowers; all the things that the wind does; ways of going to the park and what may be seen there.

¹ See Chapter II. Community life and nature study.

METHOD.

Conversation should not be limited to certain periods of the day set apart for that purpose; for in such a case, it becomes formal and forced. The methods of developing language in the kindergarten should be like the informal methods of the home. The main difference is that selected situations are provided in the school which will not only interest the child and give him the desire to talk, but will also give him a choice subject for his conversation and supply him with an adequate vocabulary in which to express his ideas. Just as there are certain occasions in the home which call the family together and the interchange of talk is general, so in the kindergarten there are times when children gather around the piano for singing, or watch together the drying wings of the new butterfly, or compose a group letter, or look at the toy brought by some child; then topics of interest to all are considered.

Throughout the day the child should have freedom of expression. He should ask questions of other children as well as of the teacher; he should ask their help in work and play; he should express his opinions and thus test his ideas by the knowledge of others who may sanction or disapprove. If the kindergarten experiences really stimulate a child to think, the conversation will be relevant to the problem to be solved. It is only when a situation does not provoke energetic thought that a little child's talk becomes silly.

Wrong methods.—It is almost impossible to give model outlines for conversations because of their inherent nature. Conversation is a give and take, modified by the mental attitudes of the people taking part. It is easier to show what the so-called conversation periods should not be like.

1. Question and answer method: The teacher may start the language period by asking, "What did we talk about yesterday?" If little impression was made the previous day, no answer may be forthcoming or perhaps a random guess. "It was a tall man who carries a flag," "Yes, a soldier." "What did we say a soldier did?" This method rouses a half-hearted interest because the children give information only.

2. Monologue method: The teacher may take the entire period to tell the children all about some experience. The children are passive, they may not be interested in the topic, or they may know as much about it as the teacher, but they have no opportunity for expression. The children should usually gather information from some direct experience.

3. Desultory method: The teacher may ask the question, "Who has something to tell us this morning?" The result is that a number of children may talk on several unrelated topics. This method does not

promote organization of thought. If the children are too immature to use ideas alone as a medium of expression, concrete material, such as pictures, finger plays, dramatization, and nature material, are aids in the organization of subject matter.

4. Overorganized method: The teacher may say, "Yesterday we talked about where the squirrel lives; to-day we will talk about what he looks like." A little child is not ready for concentration on such minute details, pigeonholed under headings. A child must respond to a whole situation if his language is to flow freely and fully.

5. Poor method of using pictures: "Here is a picture; what do you see in it?" is often a way that a conversation is started. Such a question is unnecessary if the picture illustrates experiences familiar to the children. The picture itself will suggest interesting conversation. But if the picture shows objects or activities entirely foreign to the children they may guess at its meaning, but there is little language value. The children may learn to speak the words which the teacher uses in describing the picture, but as there is no content to the words, these will drop from the vocabulary.

Right methods.—1. Recall of an experience shared by the group: A vivid experience, such as watching the carpenter at work, playing in the wind, planting in the garden, is a good starting point for a general conversation. "Language will become vigorous and effective when there has been reaction toward elemental things." The child himself must use correct language form. "Nothing but persistent oral repetition of the correct form will overcome the habit of using incorrect, ungrammatical, and inelegant expression in daily speech. These are matters of ear training and motor habits as well as of knowledge."

If the children describe an experience in a desultory, disjointed way, the teacher may ask a few suggestive questions and at the end of the period may combine the children's ideas in a sequence of events, an interesting summary.

2. Experience of one child told to the group: Kindergarten children have a tendency to run to the teacher and talk to her instead of to the group of children. When some child's contribution is of such a nature that it is of significance for the group, the teacher should help the child to tell the experience to all the children. The responsibility for interesting a group because one has something worth while to say is an attitude that should be encouraged in a social situation.

3. A social situation which calls for organization of oral expression: Invitations to kindergarten celebrations, letters to absent teachers or children, etc., are excellent opportunities for the formulation of ideas in written form.

The following is a letter sent by one kindergarten to a little boy who had moved away. It was written down by the teacher as it was dictated by the children:

DEAR PETER:

How do you like the new school? How is your mother? How are Florence and Mary and Jimmie?

Could you come to visit our kindergarten some day? We are having a good time. Are you having a good time? What do you make in the new school? We made a plow and we painted yesterday.

Please tell Mary to write a letter for you to tell us how you are and about your new school.

With love. We hope to see you soon.

KINDERGARTEN, P. S. No. ———.

4. Good method of using pictures: A question which leads to picture interpretation complies more with the spirit of art than one that suggests picture analysis. "Who can tell me a story about this picture?" is a better question than "What do you see in the picture?"

The following stories were told by some 5-year-old children as interpretations of Millet's First Step:

The father is saying to the baby "Come over here." And the mother is holding the baby. "Come over here, come over here, and I will put you on the car."

Once a man was in his garden picking up wheat and putting it all in his wagon. His mother and his baby came in to see how it was in the garden, and he put out his arms to lift up the baby, and he wanted to lift the baby, too, but he had too much work; he couldn't. Then, after he was done with that, he planted some seeds. So many trees are there! All the people came from all over the country to see how nice it was. He had fences so that nobody could come in to touch his stuff. He took his wheat to the miller, who made it into flour so that we'd have something to eat.

After a few stories about a picture have been told by the children, the kindergartner can draw attention to different parts of the picture which have been misinterpreted. For instance, the above stories show that the wheelbarrow in the First Step is an unfamiliar object. Conversation will then center on these unfamiliar objects in familiar surroundings. Sometimes it is the activity, the meaning of the picture which is misinterpreted. In such cases the kindergartner will question about the detail which gives the clue to the rightful meaning.

This method of studying a picture develops imagination and gives a unity to a picture and to the ideas about it. When questions lead to the mere naming of different parts of the picture, observation is developed, but it is not true picture study; that is, a consideration of the idea, the underlying meaning as expressed through the relations between the various parts.

Aids to oral language.—Language work is greatly aided by drawing, handwork, dramatization. Any communication of ideas is really language, because the hand and the bodily gesture have a language of their own which really carries over into verbal language and enriches it.

Dramatization, drawing, and language bear a close relation to one another. A child of kindergarten age strives to fix and clarify an idea, first, by dramatization, then by oral language, then by drawing. The younger child dramatizes the different parts of the experience without much regard to the sequence in which the events happened. His subsequent oral expression is still disjointed, but is more related than his actions. His drawing illustrates isolated parts of the experience. As the child grows, his ideas become better organized; his dramatization shows an attempt to relate different incidents, his oral expression contains incidents woven into an embryo story, and his drawing represents several objects in some relation. Dramatization is composition in primitive language form; drawing is composition in picture-writing form. Both should be used by the teacher in conjunction with language to aid in the organization of thought.

ATTAINMENTS.

No absolute standard can be set, for home conditions exercise great influence upon the language development of children. Training in the kindergarten should result in increased control, power, and desire in the following directions:

1. Control over tone of voice, enunciation, pronunciation, and grammatical construction.
2. Power to put ideas into language, either in asking questions or in making statements.
3. Ability to understand simple conversation and to respond to directions which have been stated once.
4. Desire to find proper and adequate verbal expression for vague ideas and to add to the vocabulary.

The vocabulary should include the names of the most familiar objects in the school, home, and neighborhood; also such qualities and activities of these objects as it is necessary for a child to understand in order to carry on his life and play projects, or the qualities and activities concerning which he is curious.

Habits of courteous response and intercourse should be developed in all kindergartens. "Please," "Thank you," "Excuse me," "Yes, Miss ——," should come naturally at the appropriate time. Replying when spoken to and waiting until others have finished speaking should be one result of training.

Education in language is not measured by the number of words which a child can pronounce, but by the clearness of his ideas about a number of selected experiences as shown through his adaptable, usable vocabulary.

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Chapter VI.

LITERATURE.

Stories and rhymes are the literature, the art of language for children of kindergarten age. To appreciate good literature means to enjoy one of the highest products of civilization, a product which is the result of the high development of capacities which raise man above the brute, that is, imagination and verbal expression. Good literature embodies universal principles in a form which can be understood by all peoples in all times.

GENERAL AIMS.

To give pleasure, and in giving pleasure to develop appreciation of good literature.

To rouse the imagination and the desire to create through verbal form or through dramatic representation.

SPECIFIC AIMS.

To develop control of verbal expression: 1. By supplying a choice vocabulary. 2. By giving a model of art form.

To suggest lines of action which will appeal to the child and which he will produce dramatically, carrying his imagination over into situations which he has not actually experienced.

To promote high ideals: 1. Through stories of humorous situations. The lower orders of man enjoy unusual situations even if these bring discomfort to another. The ideal humor provokes laughter by harmless surprise.

2. Through stories which interpret a child's experience. The significant in the child's own experience can be isolated and emphasized or shown in its proper relations by means of a story.

3. Through stories of moral purpose which give models for ways of acting. The moral should never be stated; if it is not indicated obviously enough for the child to interpret for himself, the story is weak.

SUBJECT MATTER.

The real subject matter of a story is the attitude toward the world which is emphasized by the activity of the characters in the story; it is the emotional response evoked in the listener. Stories may relate very directly to the mood which is to be roused by the consideration of the topics indicated in the content of the curriculum, and yet may or may not treat of the topic itself. The Night Before Christmas will be told at Christmas time, because it is the interpretation of this experience given in literary form. The Old Woman and Her Pig typifies the idea of sequence, and should be told when the children are engaged in activities which exemplify the idea of interdependence.

Stories for older children may be classified as myths, hero tales, fables, fairy tales, humorous, and interpretative stories. There are only a few stories for children of kindergarten age that can be placed under the first three headings. A simple myth which may be told is that of Little Red Riding Hood. The stories that serve the same purpose as the hero tales are simple interpretative stories of good children, such as Busy Kitty, or How Cedric Saved His Kitten. In only a few of the well known fables is the meaning evident enough to make them interesting at this age; such are, The Hare and The Tortoise, The North Wind and The Sun, and The Lion and The Mouse.

Most of the stories told in the kindergarten may be classified under the last three headings, fairy tales, humorous stories, and interpretative stories. The best fairy stories should be told often. The child realizes the irresponsibility, the unreality of the characters, and he enjoys the play of the unhampered imagination. He does not take the characters as models upon which to base his ideals of right and wrong. The humorous story generally gains its distinctive character by the unusual response of some person in a familiar situation or perhaps by the change of tone of the story-teller. It should never involve appreciable discomfort to any one; in the Gingerbread Man, the predicament creates humor, because it is the little man himself who calls out, "Now I'm all gone!" Such stories should never be adapted to convey an ethical meaning; they are intended for pure humor. In the stories that deal with situations of everyday life, there should be no subtle, ethical complication, but an evident struggle of right and wrong with the right always triumphant.

The story which is told for the evident purpose of instruction has small place in any curriculum.

Stories should occasionally be read to the children. A story-teller's dramatic manner aids in holding the child's attention, but

sometimes his attention should be centered directly upon the story itself. At such times the story should be read, as the personality of the reader is not felt as much as that of a story-teller. Stories that depend for much of their attraction on their peculiar phrasing can be chosen for reading. Those accompanied by descriptive pictures are good for this purpose, especially the Peter Rabbit stories and Little Black Sambo.

Choice of language.—The language used in telling a story should be suitable to the theme of the story. The fable should be given in concise, terse language, the fairy tale in beautiful, flowing language. For children of kindergarten age there should be little descriptive detail; the action should be rapid. Repetition of rhythmical phrases is much enjoyed at this time.

The stories from world literature should never be simplified to any appreciable extent. It is better to wait until a child is able to appreciate the thought given, in a style suited to the subject, rather than to lower its value by omitting the shades of meaning which are part of its beauty and strength. There are good stories well adapted to each age; so that it is not necessary to give a weak version of what will later be enjoyed in a perfect form. Stories sometimes weakened to adapt them to kindergarten children are: Siegfried, King Arthur, Persephone, The Golden Touch.

Story form.—Stories should have a definite plot, with introduction, complication, climax, and ending. The principal characters should stand out distinctly and all the rest be merely a setting. Little children enjoy particularly the repetition of a plot showing the principal characters in contrast, as in Little One Eye, Two Eyes, and Three Eyes.

Illustrations of good form.

THE LITTLE RED APPLE.

Once upon a time a little girl was walking under the trees in the orchard when she saw a round rosy apple hanging on the bough just over her head. "Oh, please, rosy apple, come down to me," she called, but the apple never moved. A little bird flew through the green leaves and lighted on the branch where the rosy apple hung. "Please, little robin, sing to the apple and make it come down to me," called the little girl. The robin sang and sang, but the apple never moved. "I'll ask the sun to help me," thought the little girl. "Please, Mr. Sun, shine on the rosy apple and make it come down to me," she called. The sun shone and shone, he kissed it first on one cheek and then on the other; but the apple never moved. Just then a bolsterous wind came blustering by. "Oh, please, Mr. Wind, shake the rosy apple and make it come down to me," called the little girl. The wind swayed the tree this way and that, and down fell the rosy apple right in the little girl's lap. \

THE MOUSE, THE GROUSE, AND THE LITTLE RED HEN.

One day the little red hen was pecking about, and she found a grain of wheat. "Oh! See here, see here!" she said; "I have found some wheat. Who will carry it to the mill to be ground? Then we can have a cake."

"Who'll carry it to the mill?"

"Not I," said the mouse;

"Not I," said the grouse;

"Then I'll carry it myself,"

Said the little red hen.

"Who'll bring home the flour?"

"Not I," said the mouse;

"Not I," said the grouse;

"Then I'll do it myself,"

Said the little red hen.

"Who'll make the cake?"

"Not I," said the mouse;

"Not I," said the grouse;

"Then I'll make it myself,"

Said the little red hen.

"Who'll bake the cake?"

"Not I," said the mouse;

"Not I," said the grouse;

"Then I'll do it myself,"

Said the little red hen.

"Who'll eat the cake?"

"I will!" said the mouse;

"I will!" said the grouse;

"I will eat it myself,"

Said the little red hen.

METHOD.

The home training of children will determine the kind of story told at the beginning of the year. Children from cultured homes will generally listen to one of any length, but if the first story ever heard by a child is the one told by the kindergartner then the power of listening must be developed. Mother Goose is very good at the beginning, as well as short, vivid tales that can be illustrated by gesture, pictures, or blackboard drawing.

The number of stories told will depend upon the development of the children. As a general rule, some story should be given every day, but the well known and well loved "best literature" stories should be repeated until the children can correct the kindergarten teacher if one word is misplaced. In this way the stories are absorbed and made a vital part of the child's life, of his imagination, and his expression.

The children should be encouraged to re-tell the simpler stories and to reproduce others dramatically. If the children do not readily recall a story, it is better for the kindergarten teacher to re-tell it than to drag the details from the children.

Children should be encouraged to tell original stories. These may be very crude, but power to control imaginative thought and give it verbal expression comes gradually through exercise. Interpretation of pictures helps the child to develop creative power in story-telling. The following was told by a boy of 4, about Millet's First Step:

Once there was a papa, and a mamma, and a baby. The papa worked all day, and by and by mamma said, "Papa's coming." Papa took baby up, and they went in the house and had dinner.

This simple tale follows the laws of good literary form.

Illustrations, preferably in paper cutting, may be made by the children for the stories, songs, and rhymes. If these are bound together in book form and taken home, the children will repeat the song or story to the family. Group picture books can be made in which different children illustrate different ideas and the teacher writes the title.

A story-teller's manner has much to do with the interest of the story. One who expects to impress her hearers must believe that the story is worth telling, that she is giving the highest and best of the world's thought, and that it can be imparted in no other way. She must believe that she can tell it so that the listeners will get the full value of the story. She must know the story well, not just memorize the words, but visualize it clearly. She must know why she tells it, must know the main point and how to emphasize it. She must feel and enjoy the story so much that she will be expressive in tone, face, and manner. Dramatic telling far surpasses elocution; the latter is affectation and gives overemphasis.

The full value of stories and story telling is lost when these faults are committed: Telling a story in a weak, rambling form; telling so many stories that none of them are remembered; telling so few that a taste for them is not formed; telling stories that connect with the topic of the program instead of those that relate to the need and development of the child; telling too many on the plane of everyday experience; telling stories that are adapted to older children.

ATTAINMENTS.

Appreciation of a good short story.

Ability to retell several stories, giving principal incidents in correct sequence.

Ability to create a simple, imaginative story.

Ability to reproduce dramatically several short stories.

POEMS AND RHYMES.

Mother Goose rhymes are good poetry for little children. Each one arouses the emotional reaction to some typical situation. Children who are not familiar with Mother Goose should be given many of these rhymes.

Phrases, rhymes, stanzas, and poems which are descriptive of situations and which reveal moods should be given to the children to interpret their experiences. The difficulty and length of these will depend upon the development and home education of the children. Longer poems should be read to the children.

Single lines and stanzas may often be selected from children's songs for memorization.

Poems selected from a Child's Garden of Verses.—Robert Louis Stevenson.

Bed in Summer.
Happy Thought.
Singing.
Time to Rise.
The Rain.

The Cow.
My Shadow.
The Swing.
The Wind.

Poems selected from Pinafore Palace.—Kate Douglas Wiggin and Nora Archibald Smith.

Do You Know How Many Stars.
New Moon.
One and One.
Tree on the Hill.
Chickens in Trouble.

How They Sleep.
Sweetest Place.
Pussy Willow.
The Brown Thrush.

Miscellaneous poems.

Snow.....	John Vance Cheney.
If All the Seas Were One Sea.....	Nursery Rhymes.
Who Has Seen the Wind?.....	Christina Rossetti.
Fancies.....	Frank Dempster Sherman.
All Things Bright and Beautiful.....	Mrs. Alexander (pseud.).

Rhymes selected from Play Life in the First Eight Years.—Luella A. Palmer.

The Farmer Reaps the Ripened Wheat.
The Big Bright Moon in the Big Dark Sky.
Tell Me, Little Raindrops.
Fleecy Clouds Floating By.

Rhymes selected from Memory Gems for Children.—Jessie Carr Tyndal.

Dainty Milkweed Babies.
A Little Rain and a Little Sun.

TYPICAL KINDERGARTEN STORIES.

Simple stories for the beginning of the year.

Three Little Kittens, *in* Mother Goose Rhymes.
 Little Pig and His Five Senses, *in* Play Life in the First Eight Years.
 Kitten Who Forgot Kitten Talk, *in* Kindergarten Review.
 Three Bears, *in* How to Tell Stories to Children.
 Little Red Apple, *in* Play Life in the First Eight Years.
 Three Billy Goats Gruff, *in* Firelight Stories.
 Busy Kitty, *in* Kindergarten Review.

Stories for special occasions.

The Birthday Present, *in* More Mother Stories.
 Lame Squirrel's Thanksgiving, *in* Stories and Rhymes for a Child.
 To Whom Shall We Give Thanks? *in* In the Child's World.
 The Night Before Christmas.

Interpretative and ethical stories.

The Wake Up Story, and Go Sleep Story, *in* In the Child's World.
 Susie's Dream (*in* manuscript form).
 Five Peas in A Pod, *in* In the Child's World.
 Pig Brother, *in* How to Tell Stories to Children.
 Little Half Chick, *in* Stories to Tell to Children.
 Three Pigs, *in* How to Tell Stories to Children.
 Little Red Hen, *in* How to Tell Stories to Children.
 Tig-a-me-tag My Long Leather Bag, *in* Play Life in the First Eight Years.
 Ten Fairies, *in* Stories to Tell to Children.
 Wishing Wishes, *in* More Mother Stories.
 Search for A Good Child, *in* More Mother Stories.
 How Cedric Saved His Kitten, *in* Story Land.

Humorous stories.

Gingerbread Man, *in* Stories to Tell to Children.
 Wee Wee Woman, *in* A Kindergarten Story Book.
 How Jack Went to Seek His Fortune, *in* English Fairy Tales.
 Epaminondas, *in* Stories to Tell to Children.

Standard stories.

Old Woman and Her Pig, *in* How to Tell Stories to Children.
 Thumbelina, *in* Stories and Story-telling.
 Little Gray Pony, *in* Mother Stories.
 Little Pink Rose, *in* Stories to Tell to Children.
 The Wind's Work, *in* Mother Stories.
 Master of All Masters, *in* English Fairy Tales.
 The Good Shepherd and the Lost Sheep, *in* Gospel according to St. Luke.
 The Hare and the Tortoise, *in* Aesop's Fables.
 The North Wind and the Sun, *in* In the Child's World.
 The Lion and the Mouse, *in* Aesop's Fables.
 Chicken Little, *in* For the Children's Hour.
 Shoemaker and the Elves, *in* For the Children's Hour.
 Red Riding Hood, *in* Progressive Road to Reading, Vol. II.

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¹ The literature committee of 1918, of the International Kindergarten Union, has published a selected list of stories to tell to young children.

Chapter VII.

PLAYS AND GAMES.

A child who plays thoroughly with self-active determination will surely be a thorough, self-determined man, capable of self sacrifice for the promotion of the welfare of himself and others.

Among modern educators there is now general agreement concerning the importance of play in education and in life, and much has been done since Froebel's day by way of selection and organization of forms of play which will more fully satisfy the social instincts and impulses at different periods in the child's life as well as develop his muscular control and increase his power of observation.

GENERAL AIMS.

To develop physical strength, control of the body, and ease and grace of movement.

To give training in social cooperation.

To help interpret experience.

SPECIFIC AIMS.

To develop keenness of observation of a special kind through plays which involve the exercise of one sense at a time in the identification of form, sound, or color.

To develop and coordinate the muscles of the body, especially the large torso muscles and the muscles of arms and legs, which are growing so rapidly at this period.

To encourage self expression through rhythmic activities and to help combine these activities in artistic form.

To aid in the interpretation and organization of experience through dramatic expression.

SUBJECT MATTER AND METHOD.

All games, rightly played, involve physical control, intellectual concentration, and the joy of social cooperation, but in varying degrees.

Plays and games which have special value for children between 4 and 6 years of age may be classed as follows:

Plays which call for the exercise of sense discrimination.

Plays and games for muscular activity and control.

Rhythmic activities and singing games.

Dramatic play.

Sense plays.—During the prekindergarten period—

the child is largely concerned with the mastery of the fundamental physical coordinations and the control of the primary sense perception process * * *. Objects have a twofold interest to the little child; they are of interest to him as centers of physical reaction and as the sources of new sensations * * *. They are manipulated largely for the enjoyment of the tactual, visual, auditory, and muscular sensations which they yield.

During the kindergarten period the child gains further sense training through the manipulation of a variety of materials used in the manual activities and through the musical experiences which the program includes. But in addition to this, he may enjoy and profit by the opportunity consciously to test his ability to identify colors, sounds, textures, forms, etc., which the sense plays offer. A variety of these plays are to be found in the books listed at the end of the chapter. Examples of sense plays are:

1. Touching: The blindfolded child tries to identify familiar objects by handling them. The game is made more difficult by having the objects to be identified in a bag of some soft material.

2. Hearing: The child tries to identify invisible objects by their sound, or to locate them. A similar play calls upon one child to recognize another through the sound of his voice.

3. Seeing: Three or more objects are placed in a row while a child is blindfolded. One object is removed or the order is changed. The child who has been blindfolded names the missing object or restores the original arrangement.

Plays and games for muscular control.—1. Use of play apparatus: The formative development of the body should include remedial exercises when needed and wisely directed out-of-door activities. Not only racing games of tag, follow-my-leader, hopscotch, etc., are useful, but also forms of play which are found in the present-day open-air playgrounds, including the simpler forms of sliding boards, swings, seesaws, stair steps, short ladders, climbing pole or rope, trapeze of the right height, and other play material. These activities bring into play the trunk of the body, with its large chest and abdominal muscles, and at the same time exercise the arms and legs. They increase the child's physical vitality and courage, and his moral determination to overcome his bodily limitations.

These forms of play apparatus may be used in the gymnasium during the winter season. It is even desirable, when space permits,

to have some equipment of this kind in the classroom itself, available for use at any time. One very simple and interesting exercise for bodily balance is learning to walk or run on a board which has been placed on the floor of the kindergarten room. In time, this board may be elevated an inch or two above the floor. This demands of the child more careful balancing of the body. A short stepladder in the room will also soon be mastered, and joy is unbounded when the child finds that he can sit on the top step and survey the world from this new viewpoint. Young children may need a railing to the steps, which they may hold while learning to climb. Another apparatus which may be used indoors is Dr. Montessori's invention of a fence with a 3-inch board on the top, on which a child may rest his arms and thus relieve his legs of the weight of his torso while his legs travel along the lower bars of the fence.

2. **Ball games:** Children of kindergarten age naturally use rubber balls for rolling, bounding, and tossing plays. Previous to the introduction of any games, however, the children should have ample opportunity to play freely with large 6-inch rubber balls, in order that they may discover some of the ball's possibilities as a plaything and gain some control in handling the ball.

The ball games introduced at the beginning of the year should be simple and easily acquired. These should be followed by games which call for more skill and control. For instance, the children are seated on the floor in the form of a ring. One child rolls the ball across the ring. The child to whom it comes repeats the act, and so on. Such a play is made more difficult by having each child roll the ball to one particular child across the ring. In a third and still more difficult form of the play, a target is set up in the middle of the ring and the game is to hit the target with the ball. As the children gain skill, the target may be made smaller.

Similarly, the bouncing plays may begin with simply bouncing and catching the ball, and then be followed by a game in which one child stands in the middle of the ring and bounces the ball to the other children in turn. A number of children may be given balls to bounce for a definite number of times or during the singing of a song, after which the balls are passed to other children. Similar plays, in which the ball or bean bag is tossed, may be used to advantage later in the year. Tossing the ball or bag into an open-mouthed basket, or through a hoop to which a bell is attached, develops skill. These are merely examples of many ball games which develop alertness and skill.

Rhythmic and singing games.—Rhythmic movement play may begin with some simple, already acquired activities, such as running, walking, skipping, or hopping about the room quickly or slowly.

Music of different rhythms should soon be introduced and the children allowed to reproduce the rhythm in bodily motion, each in his own way. At the beginning of the year the music should follow rather than set the pace for the child's activity. As he increases in skill he will have power to respond to different rhythms and different tempos as the music may suggest. The activities may be alternated; for example, walking a few measures, skipping, then walking again; walking, turning, walking the other way; skipping forward, then sideways, and then joining hands and skipping in a ring, etc. Many suggestions as to variations of this sort will be offered by the children. Through experimentation, the children gain control of the different simple steps and forms of movement which are characteristic of the singing games and folk dances. Very simple little dances may be developed by teacher and children by combining these movements. It is but a step from rhythms of this kind to such game forms as *Come Choose a Little Partner*, *Dance a Little Partner*, *Sally Go Round the Stars*, *Our Shoes are Made of Leather*, etc., in which the movements are suggested through the words of the game, but which allow for variation. Even the simplest rhythmic expression is valuable in developing ease and grace of movement and in furnishing the material out of which the more artistic game form develops easily and naturally. Some of the folk dances which originated in the simple, unsophisticated life of the European peasants may be introduced with modifications in order that they may have content which the children can understand. But the complicated folk dances that require much directing are for the older children who enjoy skill as much as self-expression.

Dramatic play.—The period from 4 to 8 years of age is, as a rule, "the golden era of the child's spontaneous imagination."

Imitation is transferred from the physiological and sensori-motor type to the dramatic form. Ideas which appeal are carried out in action. The activities of the environment are suggestive, they stimulate images and these images are reproduced in dramatic form.

In an earlier chapter reference is made to the informal, dramatic play in which children spontaneously indulge in connection with their toys and other familiar projects. Housekeeping and other social activities are suggested by the subject matter of the curriculum, or by any new or unexpected experience. Play of this sort represents the child's effort to interpret activities in which his interest has been awakened. The teacher leads the child through sympathetic response to make his action truer to life, to add incidents which will enrich the meaning of his play, and to organize it into a more complete series of related acts. This may be done by giving him more direct experience with the activities he is trying to interpret, or by ques-

tions leading him to see in imagination, and carry out in play, other related activities. In *Playing Store*, for instance, the children are at first absorbed in the mere buying and selling. If the play tends to remain on this level, the teacher may ask such questions as the following: "What does the mother do with the things she buys for dinner?" "How can she get these things if she can not go for them?" "What time does the grocery store close?" etc. Some topics for dramatic play which are suggested by the subject matter of the program are: The care of the baby; the daily work in the home; a visit to the toy shop and play with imaginary toys; playing in the snow and making a snow man; the postman; the blacksmith; the fireman; train; school; gardening; and other simple activities by which the average child is surrounded.

All these games call for a give-and-take between teacher and child. Through the teacher's comradeship and her sympathetic interest in his ideas, the child gains clearer comprehension of the significance of the play. As the children's imagination develops, they will probably suggest the playing out of stories. Children who come from homes where their background has been enriched by the culture of their surroundings may suggest this type of dramatic play early in their kindergarten experience and will show initiative in choosing children to impersonate the characters in the story and in carrying out the plot. Thus the value of the imaginative experience supplied by the story is enhanced, but it must always be kept in mind that plays of this kind should be the result of an emotional interest which demands expression.

Plays suggested by such stories as *Five Little Squirrels*, *Three Billy Goats Gruff*, and *Three Bears* are examples of dramatic play suitable for the kindergarten. The relation of story dramatization, drawing, and language is discussed in the chapter on language, and therefore needs no further comment here.

Many of the rhythmic movement plays previously mentioned have dramatic elements; for example, *Walking on tiptoe like fairies*, *walking heavily like giants*; *skating*; *marching like soldiers*; *running, galloping, trotting like horses*; *bending the body sideways with arms outstretched to represent the seesaw*; *whirling like a top*; *skipping with an imaginary rope*; *swinging the arm like the pendulum of a clock*, etc. These forms of play are chiefly valuable when they come as spontaneous expressions of the children's interest in the object or activity represented. Some of them may be given form through accompanying songs. *Neidlinger's Seesaw* and *Miss Crawford's This is the Way My Dolly Walks* are examples. From other dramatic plays may be developed rhythmic games, such as *I Went to Visit a Friend One Day* and *Who Will Buy My Toys?*

If the play of the kindergarten is rightly understood and wisely developed, it enables the child to express his emotional life with joy and freedom.

Some standards for the plays and games of the kindergarten are these:

The play of the child should be some self-expression of the child.

It should have a universal or at least a worth-while content so as to lead his interests toward larger experiences.

It should gradually assume a simple but genuine art form.

The worth of any game can be tested by the following questions:

Does this game arise from the children's interests, and do the children manifest joy in it?

Can this game be gradually shaped into a form appropriate to the subject?

Does this game have a worth-while content, with possibilities of future development both in form and content?

Repetition of games other than those requiring skill and satisfactory representation wastes time and retards development unless these games are being perfected in form or varied on each repetition. When the game is continually in need of correction or suggestion from the teacher, it indicates that the form is too difficult for the children or that their interest in it has not been awakened.

ATTAINMENTS.

Attitudes, interests, tastes: Readiness to express thought in free dramatic play. Enjoyment in rhythmic activities that have art form.

Habits, skills: Correction of some physical defects. Better control of impulses. Greater bodily ease and dexterity.

Knowledge, information: Recognition of the laws that control games of competition and skill. A more intelligent interest in activities related to nature and society.

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Chapter VIII.

MUSIC.

Not only do young children respond to rhythm and melody in the singing of the lullaby and nursery plays, such as, Trot, Trot to Market, but children begin to sing before they are taught set forms in the nature of words and music. When a little child is absorbed in work or play, he often croons to himself. In the story of Muhammid-Din, in Plain Tales from the Hills, Kipling tells of the wonderful palaces the little Indian boy fashioned from pebbles and bits of broken glass and withered flowers. When Muhammid-Din one day found a battered polo ball that would lend itself to a structure more wonderful than all the others, "his crooning arose to a jubilant song."

GENERAL AIMS.

To awaken a desire to sing.

To awaken a feeling for music, both vocal and instrumental.

To create social feeling through sharing a musical experience.

To make subject matter more vivid and interesting.

SPECIFIC AIMS.

To establish a light head quality of tone and smooth connected singing in phrases.

To develop the child's sense of rhythm.

To lead the child to reproduce other melodies and to think and voice original melodies.

SUBJECT MATTER.

The subject matter of the curriculum suggests the kind of songs to be sung.

Classification of songs.

1. Family songs.
2. Greeting songs.
3. Hymns.
4. Festival songs.

5. Weather songs.
6. Patriotic songs.
7. Songs of industry.
8. Seasonal songs.

METHOD IN RELATION TO GENERAL AIMS.

To awaken a desire to sing.—In any group exercise all the children will be eager to take part if the right spirit has been developed by the teacher. One must be very careful in dealing with monotones not to make the children feel that they are apart from the group in their inability to approach a standard. Monotones will learn to sing only through singing.

Enthusiasm of the group in singing may have a tendency to make the children sing too loud. This is bad for their voices and should be guarded against. Individual children who overwhelm the other voices should be taught to listen to the other voices and to the piano, while singing.

A happy medium should be sought between the very poor tone accepted in some kindergartens, and the suppressed, toneless singing in other kindergartens or schoolrooms, where the children have been continually hushed even during the singing of a song.

To awaken a feeling for music, both vocal and instrumental.—Listening to songs: As children may develop appreciation of literature by listening to stories, and appreciation of art by looking at good pictures, so they may develop musical appreciation by listening to the singing of songs. The victrola can never take the place of the human voice. Every kindergarten teacher should sing songs to her children as she would tell them stories. The selection of the songs is controlled by the interests of the group at the particular time of year. The care of the mother for the baby will suggest the singing of a Brahms' lullaby or the folk song, Sleep, Baby, Sleep. Many of the elaborate and beautiful songs which we used to try to teach to the children may be sung to them. These songs may be fanciful, as many of those in the Neidlinger book. Examples of the more esthetic type of song are:

The Bird's Nest, in *Songs of the Child World*, No. 1, Gaynor.

It is Spring, in *Nature Songs for Children*, Knowlton.

If the teacher has not the ability to sing to the children, the victrola may be used, though it is doubtful whether the children gain as much from listening to the record of the human voice as to records of instrumental music. Just as in listening to a story, the child needs to look into the face of the one who is singing.

Listening to instrumental music: We have often offended in the use of the piano in the kindergarten. We have used it so constantly in some kindergartens that we have dulled the child's faculty for listening to piano music in any intelligent way. An example of this is the stereotyped "quiet" music at the beginning of every circle and during rest periods.

Another abuse of instrumental music has been the use of great music, such as Handel's Largo, for such an inappropriate activity as playing giants. The opposite extreme of playing ragtime for marching and other types of music-hall music is still another abuse. We should not take music out of its original setting and adapt it for various uses in the kindergarten for which it was never intended. The noble strains of such music as the Largo should never be broken up and mutilated to provide a rhythm for kindergarten activities. On the other hand, music-hall music can never be anything but vulgar, no matter how skillfully played, and such an atmosphere should never invade a kindergarten. Schubert's *Marche Militaire*, Gounod's *Funeral March of a Marionette*, Schumann's *Wild Rider and Soldier's March* are examples of classic music which are simple in character and so suitable for kindergarten use. The character of all the instrumental music in the kindergarten, even if the children are responding to it by activity, has a subconscious effect, and if wisely selected helps in musical appreciation.

Certain striking types of music may occasionally be associated with the ideas of the curriculum, as, *Stille Nacht*, played or sung at Christmas time; patriotic airs of other nations played at Washington's Birthday; and parts of Mendelssohn's *Spring Song* and Grieg's *To Spring*, played in the springtime.

At the end of the year, the children may classify in a simple way songs and instrumental music as: Lullabies, music for dancing, church music or organ music, soldier music.

New music with these characteristics may be played to the children, and they may tell to what group each selection belongs.

To create social feeling.—The social element in group singing is one of the chief values in music. This element is the basis for the recent development of community singing all over the country. The sharing by the whole group of a common experience is the reason that the kindergarten teacher plays with the children and sings with them. Many music supervisors say that the teacher should never sing with the children. The reason that they make this prescription is that the children are made too dependent on the teacher's singing, and that her voice overwhelms their lighter voices. Moreover, if the teacher constantly sings with the children, she can not hear the separate voices and so can not test each child's ability to sing a melody correctly.

While it is true that there are some lessons when the teacher should listen to the children's voices, we should distinguish between the times when technique is being improved and when music is being used to voice a social experience, as in a greeting song or a

song that expresses patriotic feeling. The teacher is then identified with the group.

To make subject matter more vivid and interesting.—There are certain phases of subject matter which can best be presented through sound. Pictures make direct and tangible appeal to the child, but it is more often an intellectual rather than an emotional appeal. If one wished to awaken the emotion of reverence, the singing or playing *Stille Nacht* to the children would create the proper atmosphere for showing the Christmas pictures.

Certain ideas are better represented by sound than in any other way, as the clang of the blacksmith's hammer or the sound of church bells. This kind of musical characterization has a very close relationship to musical appreciation.

METHOD IN RELATION TO SPECIFIC AIMS.

To establish a light head tone of pleasing quality.—1. To secure good tone production: By pitching songs so that the children shall not sing below F (the first space) nor above G (space above fifth line).

By not allowing children to sing with loud voices in group singing.

By encouraging much individual singing, so that the child may hear the quality of his own voice.

By listening to the teacher's voice as a model and to kindergarten children who sing with pure tone.

2. To secure smooth connected singing of phrases: Breath control is an important element in tone production, and the habit of smooth, legato singing should be established from the first as well as pure tone. Do not teach songs which are naturally rhythmic, as *Jack and Jill* or *Here's a Ball for Baby*, until the habit of singing legato is established. We should teach short songs and through imitation of the teacher encourage the singing of a fairly long phrase on one breath, as *Our Goodmorning We will Say*. The children can be led to do this intelligently by saying the phrase, as one would talk the whole sentence, smoothly, not in broken phrases.

All songs should be sung quite slowly at first. We expect the children to master words, rhythm, and melody too quickly. When this is done, during the first weeks of school, one will always hear some children drawling out the song after all the others have finished. *Mother Goose* rhymes and *Finger Plays* may well be spoken at the beginning of the year and not sung. If they are said expressively and in a flexible speaking voice, they are just as interesting as when sung. Instrumental music may accompany the dramatization of the *Mother Goose* rhymes.

Children should not sing while playing active games. Usually the activity is so engrossing that the children forget to sing.

In games like *The Farmer in the Dell* and *Itiskit Itaskit*, where the children are pacing around slowly, action would not interfere with breath control. Care should be taken, however, not to have this singing degenerate into the poor tone quality heard at children's parties or in games played on the street.

To develop the child's sense of rhythm.—1. Rhythmic response of the body to instrumental music, as marching, skipping, running, etc.

Music follows child's activity.

Child responds to a rhythm set by music.

Child responds to new music with the right activity, recognizing music to which one can skip, run, etc.

Child responds to characteristic music in appropriate ways: For instance, in *Ladita*, the slow measured character of the first measures is followed by a very lively rhythm. The children may suggest tramping, walking (around circle or into center and out) to the first part of the music; then they may jig in place or twirl around to the second part of the music.

2. Keeping time with hands and instruments, etc.

Clapping the rhythm of songs.

Clapping to different tempos as, 4/4 time, waltz time, etc.

Keeping time with music sticks, as in clapping.

Inventing rhythms with music sticks.

Keeping time in a band with triangles, drums, tambourines, etc., all instruments together.

Groups of instruments following the leader.

Distinguishing light and heavy instruments for characteristic music as in response to the music of *Ladita*, beating drums and tambourines for the heavy part and striking triangle and shaking tambourines for the light part.

To lead the child to think and voice original melodies and to reproduce other melodies.—1. Testing voices: During the first weeks of school the children's voices should be tested and the children classified in three groups according to their ability to match tones. Group I is composed of children who can carry simple melodies correctly; Group II of children who can sing parts of a melody, but who have too limited a range to reach the high notes; Group III is made up of monotones.

2. Matching tones: A child's inability to sing a melody is in almost every case not a physical defect, but an inability to hear the different tones that make up the melody. To sing a song correctly, a child has not only to hear and produce variations in pitch, but

also to master the rhythm and the words and associate the words with the tones.

While it is best to begin with simple songs and then proceed to analysis as described later, some tone work is necessary with the children who have a limited range of only a few notes. It is better to do this work in small groups, although occasionally it is an interesting exercise for the whole kindergarten, and the correct reproduction of tone by the children who can sing helps the other children to hear tones more clearly, because they are uttered in the same medium, a little child's voice. The piano and the teacher's voice may also be used as models. The sound of the piano is clearer and more incisive, but the quality of the teacher's voice is more like the tone that the child is to make. Of course, when the problem is to link word with tone, singing is a better model.

There are many suggestions for tone production in songs and stories, for instance:

The baby's trumpet, "toot toot toot toot too."

This little pig cried, "wee wee wee" (high tone).

Intoning the three bears' complaint, "Who's been tasting my soup?" in three intervals.

Bird calls. Bells.

Family song, "This is the mother, this is the father," etc., to tones of the scale.

It is a good plan to have small groups of children sing around the piano where the children may hear the melody clearly.

3. Monotones: Much individual work should be done with the monotones, if possible in a room where other children are not present.

Let the child begin by making his own tone first, as "Too-too." (Baby's trumpet.) Then let the teacher imitate. See if, through imagination, he can not blow a little trumpet far away. Light and small tone usually means high tone to a child. Encourage the child through imitation to make higher tones, and approve any change from one pitch, however slight. If the child has heard the siren of a fire engine, the imitation of sweeping up the scale sometimes helps raise the tone when a child can not sing separate intervals of the scale.

The teacher should be careful that the monotones do not sing louder than the children who carry the melody. They must be helped to listen to melody while singing with the other children.

4. Songs: In the first few weeks of school there should be very few songs taught to the children, and these of the very simplest character. Often a part of the song, complete in itself, may be used, as, Good-bye to You, Good-bye, Good-bye. (In Child Land in Song and Rhythm.)

We have been accustomed to emphasize group singing in the kindergarten because of the social nature of the exercise and because the subject matter of the song is of interest to the group. We have too often been unaware of the bad habits established by much of this kind of singing at the beginning of the year. When we accustom ourselves to listen to the individuals in a group, we shall find that some of the children have a range of only a few notes because they do not hear the other tones. When they sing alone, it is a little crooning, sing-song melody. When they constantly sing in this way against piano music or against the teacher's voice, they are getting blurred impressions of sound; therefore there should be very little group singing at first. We have not had enough individual singing at the beginning of the year. If there is the right atmosphere in the kindergarten, and children are made to feel that every attempt to sing is acceptable, self-consciousness should not develop in most cases.

From the individual singing will develop spontaneous little melodies. We do not begin teaching drawing by setting up our own perfect copy, expecting the children to reproduce it. We encourage children to work freely and imaginatively, and gradually to approximate more conscious results. Why should we not do this in music? Let the children sing their own little melodies to such phrases as "Good-morning to you," and "I am here," in answer to the roll call. I have heard children invent spring songs and fall songs on the spur of the moment, when that type of song was called for and other children were singing memorized songs. The "invented" song was usually in the form of a recitative. One day I heard a boy break away from the tune of the Mulberry Bush to which the children were singing the kind of work they were doing, and invent a musical form for the vacuum cleaner, because the unwieldy name presented a problem in rhythm. The basis for a child's hearing of other people's tunes is his learning to hear his own simple tunes. This rather "accidental" type of singing tunes should be developed into the ability to make little tunes to such phrases as:

Hush my baby,
Go to sleep.

Dum, dum, dum,
Hear my little drum.

Up, up in the sky
The little birds fly.

Of course the teacher will have to help the child at first by recording the melody and reproducing it with voice or piano. Those of us who are familiar with Mr. Cady's work know what definite and valuable results may be attained in this creative work with little children.

With the second and third group, then, we should have much individual singing before we teach any but the simplest songs. Very

few songs should be sung by the whole kindergarten, and little groups of children who can carry the melody may often sing the song to the rest of the children. The teacher should extract the difficult phrases as "Good Morning, Dear Children," in the Hill songbook, and have the children repeat through imitation. Of course the song is always sung to the children first as a whole and in relation to a situation. The drill aspect should never come first.

ATTAINMENTS.

Attitudes, interests, tastes: Interest in listening to music and in voicing melody, alone or in concert. A new interest in music that is on a higher plane than that which the average child has heard before coming to school.

Habits, skills: Clear, light-tone production. Connected singing of phrases. Breath control gained through correct phrasing. Ability to change the pitch of a melody which the child himself has begun in too low a key.

Knowledge, information: Ability to respond to new rhythms in characteristic ways; to distinguish characteristic motives.

Power to sing alone a few simple songs.

LIST OF SONGS FOR THE KINDERGARTEN.

This list of songs is merely suggestive; there are other songs and other songbooks which are appropriate for use in the kindergarten.

The attempt has been made to grade the songs according to their difficulty. Those listed "1" are the simple type of song that most 5-year-old children can sing. The songs under "2" are more difficult and would be suited to the ability of musical children and children who remain in the kindergarten for two or three years. The songs listed under "3" are to be sung to the children by the teacher, just as stories are told to them by the teacher.

It is hoped that this classification of songs will help teachers to choose songs which are suited to the musical ability of the group and songs which are good from a musical standpoint.

Introductory Songs.

1. Boat Song No. 1. Cady: Music Education. 2d Book. Chicago, Clayton F. Summy. p. 49.
2. See Saw No. 15. Cady: Music Education. 2d Book. Chicago, Clayton F. Summy. p. 50.
3. Dolly Dear No. 9. Cady: Music Education. 2d Book. Chicago, Clayton F. Summy. p. 49.

Fall Songs, 1.

1. Falling Leaves. Dann: First-Year Music. New York, American Book Co. p. 75.
2. Hallowe'en. Dann: First-Year Music. New York, American Book Co. p. 75.
3. The Leaves Come Pattering Down. No. 25. Cady: Music Education. 2d Book. Chicago, Clayton F. Summy. p. 20.

Fall Songs, 2.

1. Song of the Seasons. Bentley: Song Primer. Teachers' Ed. New York, A. S. Barnes Co. p. 17.
2. Come, Shake the Apple Tree. Smith: Modern Music Series Primer. Book 1. New York, Silver Burdette Co. p. 18.
3. Nature's Good-night. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 22.

Lullabies.

1. Hush! My Baby, Go to Sleep. (Key of A, notes A and E.)
2. Cradle Song. Bentley: Song Primer. Teachers' Ed. New York, A. S. Barnes Co. p. 16.

3. Sleep, Baby, Sleep. No. 53. Cady: Music Education, 2d Book. Chicago, Clayton F. Summy. p. 62.
8. At Night. Tomlins: Souvenir Song Book. London, H. W. Gray Co., Agents for Novelle. p. 93.

The Family.

1. The Family. Jenks and Walker: Songs and Games for Little Ones. Chicago, Oliver Ditson Co. p. 97.
2. Baby Dear. Riley and Gaynor: Lits and Lyrics. Chicago, Clayton F. Summy. p. 56.

Greeting.

1. Teacher calls the child's name to two tones of the scale. The child answers, "I am here."
 2. Good-morning Song. Dann: First Year Music. New York, American Book Co. p. 73.
 3. Good-morning to All. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 3.
- (Teacher sings child's name; child answers. Children sing each other's names.)

Thanksgiving Songs, Secular.

1. Turkey Time. Dann: First Year Music. New York, American Book Co. p. 76.
2. Thanksgiving Song. (First half of it.) Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 28.

Thanksgiving Songs, Religious.

1. Thanksgiving Song. (Last half of it.) Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 28.
2. Harvesting. Smith: Eleanor Smith Music Course. Book 1. New York, American Book Co. p. 27.
3. Thanksgiving Song. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 27.

Winter Songs.

1. Winter Time. Dann: First Year Music. New York, American Book Co. p. 79.
2. Little Snow Flakes. Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 11.
3. Snow Flakes. Riley and Gaynor: Songs of the Child World. No. 1. Chicago, John Church Co. p. 71.

Jack Frost Songs.

1. Jack Frost. Dann: First Year Music. New York, American Book Co. p. 76.
2. Jack Frost. Bentley: Song Primer. Teachers' Ed. New York, A. S. Barnes Co. p. 38.
3. Ting-ling. Cady: Music Education, 2d Book. Chicago, Clayton F. Summy. p. 57.

Christmas Songs, Secular.

1. Christmas Day. Dann: First Year Music. New York, American Book Co. p. 77.
2. Santa Claus. Bentley: Song Primer. Teachers' Ed. New York, A. S. Barnes Co. p. 28.
3. The Christmas Tree (Father Christmas). Smith: Modern Music Series. Book 1. New York, Silver Burdette Co. p. 106.

Christmas Tree Songs.

1. Tannenbaum. Whitehead: Folk Songs and Other Songs for Children. Chicago, Oliver Ditson Co.
2. Around the Christmas Tree. Riley and Gaynor: Lilts and Lyrics. Chicago, Clayton F. Summy. p. 6.
3. A Wonderful Tree. Jenks and Walker: Songs and Games for Little Ones. Chicago, Oliver Ditson Co. p. 70.

Christmas Songs, Religious.

1. The First Christmas. Jenks and Walker: Songs and Games for the Little Ones. Chicago, Oliver Ditson Co. p. 26.
2. Martin Luther Cradle Hymn, "Away in a Manger."
3. Christmas Carol. Riley and Gaynor: Songs of the Child World. No. 1. Chicago, John Church Co. p. 29.
3. Holy Night, Silent Night.

Patriotic Songs.

1. Our Flag. Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 22.
2. America. Dann: First Year Music. New York, American Book Co. p. 70.
3. Star-Spangled Banner.

The Clock.

1. Tick-tock. Dann: First Year Music. New York, American Book Co. p. 66.
2. Tick-tock. Neidlinger: Small Songs for Small Singers. New York, G. Schirmer. p. 54.

The Moon.

1. The Moon Man. Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 12.
2. The Moon and I. Dann: First Year Music. New York, American Book Co. p. 51.
2. Moon Song. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 54.

The Stars.

1. The Star. Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 12.
2. Twinkle Twinkle Little Star. Elliott: Mother Goose Melodies. New York, McLaughlin Bros.

3. When the Little Children Sleep. Thirty Songs for Children. Chicago, Oliver Ditson Co. p. 36.
3. Every Night. Tomlins: Souvenir Song Book. London, H. W. Gray Co., Agents for Novelle. p. 27.

The Sun.

1. Good-morning to the Sun. Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 4.
2. Sunshine. Bentley: Play Songs. New York, A. S. Barnes Co. p. 42.
3. God's Love. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy.

Morning and Night.

1. Good-morning Song. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 5.
2. Day and Night. Bentley: Song Primer, Teachers' Ed. New York, A. S. Barnes Co. p. 43.
2. Wee Willie Winkie. Crowninshield: Mother Goose Songs for Little Ones. Springfield, Mass., Milton Bradley Co.
3. Lullaby by Brahms. (Little Dust Man.) Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 79.
3. Cradle Song. Whitehead: Folk Songs and Other Songs for Children. Chicago, Oliver Ditson Co. p. 209.

Spring, the Season.

1. Cuckoo, Cuckoo Calls from the Wood. No. 49. Cady: Music Education. 2d Book. Chicago, Clayton F. Summy. p. 60.
2. Spring is Coming. Smith: Modern Music Series Primer. Book 1. New York, Silver Burdette Co. p. 32.
3. It is Spring. Knowlton: Nature Songs for Children. Springfield, Mass., Milton Bradley Co. p. 84.

Spring, the Rain.

1. Raindrops. Dann: First Year Music. New York, American Book Co. p. 81.
2. The Rainy Day. Neidliger: Small Songs for Small Singers. New York, G. Schirmer. p. 4.
3. Weather Song. Jenks and Walker: Songs and Games for Little Ones. Chicago, Oliver Ditson Co. p. 22.

Spring, the Wind.

1. Wind Song No. 16. Cady: Music Education. 2d Book. Chicago, Clayton F. Summy. p. 51.
1. Kite Song No. 17. Cady: Music Education, 2d Book. Chicago, Clayton F. Summy. p. 51.
2. The Wind. Bentley: Song Primer. Teachers' Ed. New York, A. S. Barnes Co. p. 35.
2. Who Has Seen the Wind? Bentley: Song Primer. Teachers' Ed. New York, A. S. Barnes Co. p. 31.
3. Kite Time. Knowlton: Nature Songs for Children. Springfield, Mass., Milton Bradley Co. p. 76.

Spring, the Birds.

1. All the Birds Have Come Again. Jenks and Walker: Songs and Games for Little Ones. Chicago, Oliver Ditson Co. p. 28.
1. Robin Redbreast, Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 15.
2. The Bluebird. Neidlinger: Small Songs for Small Singers. New York, G. Schirmer. p. 30.
2. The Robin. Welles: Songs about Birds. Chicago, A. W. Mumford. p. 7.
3. The Robin's Song. Neidlinger: Small Songs for Small Singers. New York, G. Schirmer. p. 17.
3. What Robin Told. Knowlton: Nature Songs for Children. Springfield, Mass., Milton Bradley Co. p. 38.
3. The Nest. Riley and Gaynor: Songs of the Child World. No. 1. Chicago, John Church Co. p. 10.

Spring, Bees and Butterflies.

1. May. Smith: Eleanor Smith Music Course. Book 1. New York, American Book Co. p. 31.
2. Butterflies Are Flying. Bentley: Play Songs. New York, A. S. Barnes Co. p. 4.

Spring, the Garden.

1. Mary, Mary, Quite Contrary. Schaeffer: Thirty-six Songs for Children. Boston, T. C. Birchard Co. p. 9. Or Elliott: Mother Goose Melodies. New York, McLaughlin Bros.
2. His First Bouquet. Poulsson and Smith: Songs of a Little Child's Day. Springfield, Mass., Milton Bradley Co. p. 11.

Spring, the Flowers.

1. Buttercups. Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 7.
1. Daisies. Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 6.
2. Little Pussy Willow. Dann: First Year Music. New York, American Book Co. p. 38.

Easter.

1. Bunny. Neidlinger: Small Songs for Small Singers. New York, G. Schirmer. p. 13.
1. Little Yellowhead. Neidlinger: Small Songs for Small Singers. New York, G. Schirmer. p. 53.
2. Nature's Easter Story. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 37.
3. Easter Voices. Smith: Eleanor Smith Music Course. Book 1. New York, American Book Co. p. 28.

May.

1. May. Jones-Barbour: Child Land in Song and Rhythm. New York, Arthur Schmidt. p. 8.

2. Chorus of "May." Knowlton: Nature Songs for Children. Springfield, Mass., Milton Bradley Co. p. 15.
3. Come Lassie and Lad. Whitehead: Folk Songs and Other Songs for Children. Chicago, Oliver Ditson Co. p. 2.

Hymns.

1. Morning Hymn. Jenks and Walker: Songs and Games for Little Ones. Chicago, Oliver Ditson Co. p. 7.
2. Thanks for Dally Blessings. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 17.
3. God's Work. Hill: Song Stories for the Kindergarten. Chicago, Clayton F. Summy. p. 71.



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EDUCATIONAL CONDITIONS IN SPAIN

By

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SPECIALIST IN FOREIGN EDUCATIONAL SYSTEMS
BUREAU OF EDUCATION

[Advance sheets from Biennial Survey of Education, 1916-1918]



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EDUCATIONAL CONDITIONS IN SPAIN.

By WALTER A. MONTGOMERY,

Specialist in Foreign Educational Systems, Bureau of Education.

CONTENTS.—I. Introduction. II. National primary education: Illiteracy—Administration of the primary schools—Present state—Private schools—Enrollment in primary schools—Cost of national primary education—Sanitation and health of schools—Minimum curriculum of national primary schools—Extra-scholastic activities—Teachers' salaries and pensions—Normal schools—Summary of projected reforms. III. Secondary education: Institutos general and colejos. IV. University education: Holiday course for foreigners. V. Extra educational agencies.

I. INTRODUCTION.

Though Spain maintained her neutrality throughout the World War, her educational, economic, and political conditions—in all countries inextricably bound up with each other—were affected nearly as much as those of the nations participating in it. In France, England, and Italy, educational reforms began early to press for recognition; and popular education came to be seen clearly as the supreme means upon whose efficient organization depended ultimately the salvation of national ideals in the perhaps even more trying period of adjustment after the war. Even Germany was constrained to seek ways of adapting the schools to such national service; and movements like the tentative *Begabenschule* show the working of the leaven. In Spain, on the contrary, the dominant classes were plunged, almost over night, into enormous prosperity.

The Spanish Government awoke to its opportunities, as was evidenced in many official acts. With the approaching expiration of the charter of the Bank of Spain, the minister of finance appointed a commission to draft a new bill for the Cortes, setting forth a comprehensive and far-reaching program, and calling for the purchase and operation of railroads by the state, and the development and utilization of all natural resources and waterpower. The minister of public works outlined unprecedentedly bold steps for a complete economic reconstruction of the Kingdom, involving a greatly enlarged sphere of activity and intervention by the state, based on an intensified economic survey of all national resources. The Association of Spanish Civil Engineers was granted by the Government the privilege of convening a congress in Madrid in the spring of 1919 for the purpose of discussing numerous phases of national development to which this profession can contribute. Among these are elementary and higher technical instruction, the organization of labor, sanitation and hygiene, and social questions relating thereto.

The advent of this material prosperity, however, has been accompanied by results positively unfavorable to the spiritual and educational life of the nation. It was a prosperity from its very nature unevenly distributed, being confined virtually to the great mining corporations of the mountainous Provinces, and to the shipping companies of the coast cities. The cost of the necessities of life soared beyond all proportion to the wages and incomes of the great majority of the inhabitants of the Kingdom. The 25,000 or more teachers of Spain found existence increasingly difficult as the war went on. The increasing economic pressure lent a welcome excuse to the classes who are by tradition unfavorably disposed to popular education and constitute through the press and the Cortes¹ the vocal elements of the nation; they declared all attempts to enlarge the educational system out of the question in the face of such dire national stress.

Against these well-organized forces, the schools and the teachers, uninfluential and poorly organized, could make no headway. The nation-wide desperation of the teachers began to be openly expressed in their local, communal, and provincial assemblies early in 1918, and was voiced in a corporate demand for increased salaries by the national association. Upon Don Santiago Alba's acceptance of the ministry of public instruction in March, 1918, the movement received his cordial support, genuinely interested as he was in the improvement of the schools and the welfare of the teachers. There has been no national, and very slight local and communal, increase in the salaries of teachers since 1857, when the present school system was initiated. The average salary, of men and women, has always been less than \$200. Sr. Alba planned systematic increase of salaries and far-reaching reorganization of the entire educational system. He contemplated the rapid training of an immediately available supply of primary teachers by sending a larger number for study abroad at one time than ever before. A system of libraries and intensive institute courses for teachers already in active work were also planned.

Unfortunately for the success of his plans, Sr. Alba's only nucleus of aid was found in the socialists, whose very support could but discredit his cause before the nation, inasmuch as they were held responsible for the serious strikes of 1917. Sr. Alba's policies, calling for nearly five million dollars to be used for more and better schools, and especially for increasing the salary of all teachers to a minimum of \$300 per annum, encountered powerful opposition from many quarters.

¹ A minority of influential individuals and progressive newspapers constituted exceptions to this general statement.

Six months of factional struggle in the Spanish Cabinet ensued, centering around the activities of Sr. Alba, and culminated in the definite refusal of the majority to assent to his reforms, and in his resignation. Count Romanones, Minister of Justice, and formerly minister of public instruction, a man of liberal views, believed to be in sympathy with Sr. Alba's main plans, and acceptable to the teachers of the Kingdom, was appointed in his stead. But the storm raised was fomented by the liberal element of the nation at large, and could not be laid by any half-way measures. The liberals continued, in every issue of a minority of influential journals, to set before the nation the elements that had compassed the downfall of the minister of public instruction. Early in November, 1918, the resignations of the entire Cabinet were called for, and Count Romanones was asked by the King to form a new ministry. It is true that other causes, international in character, were also operative in precipitating these events; but the significant fact remains that the position taken by a progressive minister of public instruction furnished the clearly marked line of cleavage leading to the resignation of a ministry originally selected for its personal strength and political experience.¹

The pressure of the demand for increased salaries was undiminished by the change of ministers. More successful than his predecessor, Count Romanones, just before he became premier, obtained the consent of the ministry to an increase of the salaries of primary teachers ranging from a maximum of \$1,000 per annum to a minimum of \$300. Subject as the decree was to serious modifications in actual practice, it yet constituted a signal proof of the power of public sentiment. The teachers, too, through their associations, not only bore an active part in the agitation for increased salaries, but they pressed for urgent reform on the administrative as well as on the purely instructional side of the schools. They repeatedly submitted these reforms in recommendations to the minister, which will be discussed under their several heads.

II. NATIONAL PRIMARY EDUCATION.

ILLITERACY.

In 1916 Spain had an estimated population of twenty and a half million. The figures for illiteracy are not tabulated for that year, but it may be safely assumed that they did not fall below that of the year 1910, when nearly twelve million people of all ages, a percentage of 59.35, were reported as unable to read and write. Indeed, with the continuous closing of primary schools in all parts of rural Spain

¹ For the suggestion of some of the above lines of discussion acknowledgment is made to the very illuminating volume *La Educación Nacional* by Don Cesar Gillo y Cortés, Madrid, 1914.

through lack of funds to attract teachers, it is possible that the illiteracy for the latter year would surpass even the high figure given. The Provinces showing greatest illiteracy (estimated, 1916) are as follows: Almería, Málaga, Jaén, Albacete, Murcia, the Canaries, Ciudad Real, Córdoba, Catillón y Alicante, all of which range above 70 per cent. Those showing illiteracy ranging below 40 per cent are Segovia, Burgos, Palencia, Madrid, Alava y Santander. The decrease in illiteracy has been slow since 1860, when statistics were first gathered for the nation at large. In that year the percentage was 75.52; in 1877, 70.01; in 1887, 68.01; in 1900, 63.78. Spain's leaders have never been slow to recognize the extreme seriousness of this menace; but beyond a few provisions in the national budget, and those of the most advanced communes for a supplementary fund for teachers holding night schools for adults—seldom rising for the individual above \$50—nothing constructive has been attempted. Sr. Alba worked upon definite ideas along this line, but his brief tenure of office precluded the realization of his schemes. In 1916 throughout Spain 12,713 separate classes were conducted for the instruction of adult men and women. At a meeting of the National Assembly of Teachers held in Madrid in February, 1918, resolutions were passed, calling upon the Government to take vigorous measures for the suppression of illiteracy. It was recommended that the Government should:

1. Not permit any man to vote who could not read or write.
2. Not issue an honorable discharge to the soldier who remained illiterate.
3. See that the law be enforced forbidding the admission of a workman into an industry without a certificate of instruction.

ADMINISTRATION OF THE PRIMARY SCHOOLS.

The legal administration of the schools of Spain is under the supreme control of the minister of public instruction, an official created in 1900, appointed by the King, and sitting as a member of the royal Cabinet. He is charged with the duty of reporting to that body periodically the state of education throughout the Kingdom, with recommendations for its encouragement and improvement. In him is vested the appointment, to be approved by the King and Cabinet, of all educational officials, administrative and instructional. Taking up first the basic division of the system of public instruction, that of primary education, next under the minister of public instruction ranks the director of primary education (created in 1911), responsible to the minister and with special charge of the administrative and inspectional sides of that branch of public instruction. Immediately subordinate to the director general are the provincial inspectors, named by the minister upon the recommendation of the former, who are charged with the periodical visitation of the local

primary schools, the assembling and instruction of the local juntas in their duties and powers, and the submission of full and regular reports to the office of the director general. For the 49 Provinces, which embrace the 24,299 national primary schools, there are 171 inspectors and subinspectors. The number is three times that of 10 years ago. They rank in nine categories, according to length of service and salary. Upon their energy and the degree of fidelity with which they discharge their duties hinges vitally the well-being of the system. Responsible to the provincial inspectors, and required by law to cooperate with them, are the local juntas (committees). These are named by the *ayuntamientos* (boards) of the respective municipalities, and consist of the alcalde (mayor) *ex officio* and designated members, including one or more householders who are patrons of the primary schools. In the juntas are vested the powers of frequent visitation and general oversight of the local schools, their enrollment, physical, and social conditions. The juntas have no financial duties or powers whatsoever, all such, relative to the establishment or maintenance of the schools, remaining entirely in the hands of the *ayuntamientos*. Upon the periodical visitations of the provincial inspectors the juntas are required to assist them in every way in their inspection of the primary schools and to meet in conference and to formulate with them the needs of the schools.

Despite this inspectional machinery, it is estimated that one-third of the schools of this grade go unvisited each year. Léon had 618 schools unvisited in 1917, and many Provinces have as many as 100, 200, or even 300 such schools. Some explanation may be found in the fact that for many zones the posts of inspectors have, for various reasons, been intermittently vacant. A brighter side of the picture, however, is presented in Cadiz, which leads with all the schools visited within the period of two years, in the Balearic Isles, and Valladolid, with all but a very few visited. Inspectors claim in their defense that they have been made responsible for zones besides their own, and that in many instances they can not secure reports as to location of actually existent schools. They complain of the indifference of secretaries of the *ayuntamientos* in furnishing information that schools have been closed; and that, further, despite their activity in localities where the need of new schools is most urgent, and their clear outlining of the legal terms on which such localities may, in cooperation with the State, secure the needed schools, they are unable to arouse interest on the part of the local authorities. In brief, they maintain that the law for compulsory education of June 23, 1909, is not enforced for the larger number of the municipalities, which neglect to draw up or revise the annual school registration reports.

In January, 1918, a numerous committee of the National Association of Inspectors waited upon the minister of public instruction and the director general of primary education, and presented as the composite sense of that body, for enactment into law, a number of recommendations, the salient ones of which are here given:

1. Both men and women inspectors should be required to remain not less than 8 or 10 days in the rural districts and villages of their zones, visiting and studying all the schools, and examining personally as many boys and girls as possible; upon this material they should present ample reports, to be published by the director general of primary education. In turn, the inspectors should be relieved as far as possible of clerical labor, and should be sent to provincial sections to establish personal relations with the local civil officials.

2. General questionnaires should be drawn up and sent to all teachers of primary schools, inquiring as to changes and reforms deemed most urgent for the development of the schools.

3. The Government should at once take up the construction of school buildings of modern and sanitary type, and on sites answering the legal requirements, and should at once take steps to improve the existing ones, borrowing money and issuing bonds on the national credit.

4. Every school building erected in villages of less than 1,000 inhabitants should have annexed to it a teacher's dwelling conforming to sanitary and architectural requirements.

5. Every effort should be directed by school authorities, both municipal and national, to improve the school attendance, and to awaken educational interest by the incentives of school lunches, playgrounds, libraries, school loan funds, and all extra-scholastic activities possible.

6. In agricultural and industrial communities, at least one full section of daily work in school should be required of all children over 10 years of age whose labor is usually regarded as necessary for the aid of the father in the support of the family.

7. All inspectors and local teachers should be required to take part in all activities of their respective spheres, studying and working for the development of all matters relating to education of the children, and the correction of juvenile delinquency.

8. All matters relating to the visitation of private schools should be passed upon by the body of inspectors; and, unless otherwise agreed upon, the scope of such visits will be restricted to points of hygiene and ethics.

9. In rural schools special importance should be attached to agricultural and horticultural teaching, and in those of mining and industrial centers to elementary technology and related sciences.

10. There should be established in provincial capitals special schools for adults, analogous to those projected for men, to give to women ample preparation for vocational work.

11. Inspectors should have the power of intervening in all matters affecting the rights of teachers.

12. Tenure of office for inspectors should be better safeguarded, inspectors being removable from office only by royal decree, and upon proven charges of incompetence or bad conduct.

13. In every provincial capital there should be established a well-equipped permanent pedagogical museum and school exposition.

PRESENT STATE OF THE NATIONAL PRIMARY SCHOOLS.

The national primary schools of Spain are administered according to the territorial lines of the 49 Provinces of the Kingdom. They are taught by teachers who are paid wholly or in part out of the national treasury. In 1916 they included 7,409 one-room schools for boys and 7,075 for girls; 243 graded schools for boys, 158 for girls; 8,935 mixed graded, and 479 for very young children, a total of 24,299 national primary schools in the Kingdom. In 10 years, only 250 new school buildings have been reported as erected in the entire country. In 1917, according to the statement of the late Deputy Giner de los Rios, member of the committee of the Cortes, appointed to investigate educational conditions, from 27,000 to 40,000 schools were lacking of the number contemplated even by the establishing law of 1857.¹ Sr. Alba's projected reforms included the establishment of 20,000 additional schools within eight months, with modern sanitation and equipment and the guarantee of the appointment of that number of men and women teachers within that period.

The number of schools vacant for one or more years constitutes the most serious problem the educational authorities have to face.² The suggestion has been made that the minister of public instruction be authorized by law to transfer from the State back to the commune all responsibility for such a school remaining vacant for three years.

In the phase of primary education, naturally most efficient, that of the graded schools located in the centers of population, dissatisfaction is expressed by Spanish educational thinkers with the infrequency with which they are visited and the continued failure to secure reports

¹ This seems an overstatement in the light of the estimate by Count Romanones, then minister of public instruction, in his memoria for 1910. He put the number at 9,579 schools.

The statement is made in *La Escuela Moderna* for September, 1917, that there were in that year 30,000 towns and villages in Spain without schools and without teachers; that 3,000,000 children were, at one time, not in the schools; and that 10,000 men and women were needed in addition to those already in service.

² Even in the Province of Navarra, which, until November, 1918, had charge of its own public school system, an attempt to require all incoming teachers to take the schools longest vacant met with but doubtful success. The maximum salary of \$200 is not sufficient to attract new teachers.

on many of them. Persistent attempts have been made, both by local teachers' associations and the press, to have all the royal decrees relating to them reduced to one section of the code.

The clearest exposition of the condition and needs of the graded schools was made in the recommendations of the graded-school teachers' division of the National Association at their meeting of 1917. The reforms then urged included greater care in the matter of the appointment of graded-school directors, less regard to political and personal influence, and participation by the teaching force in such appointment, sanctioned by the inspector; enlarged responsibility for the directors in the recommendations of the members of the teaching staff for appointment, including at least one supply teacher; the formulation of programs of study, exercises, and school excursions, in cooperation with the section teachers, to be transmitted to the regional delegate in the Cortes for presentation to the educational committee of that body.

These recommendations bore fruit in the very progressive royal decree of September 19, 1918, the salient points of which are as follows:

1. In graded schools instruction shall be given in the subjects determined for national schools by present legislation now in force.

2. The local junta for the school, named according to law by the *ayuntamiento*, shall have wider latitude as to prescribing hours, division of classes, etc., and especially in organizing school outings, excursions, etc. The director shall have wider and more definite duties, especially in visiting classes, and correspondingly more thorough and frequent reports to the inspector.

3. The number of pupils enrolled in graded schools shall not exceed 50 for each section, except in cases of exigency, sparsity of population, or other valid reason agreed upon by the director and inspector.

4. The director, advised by the teachers, shall lay before the local junta the physical needs of the schools as a whole and by grades, and all necessary equipment shall be provided at the expense of the State.

5. All pupils admitted shall have completed the sixth year of their age, been vaccinated, and be suffering from no contagious disease. All corporal punishment shall be forbidden. The State and the local junta combined shall furnish books and paper free, and in girls' schools all equipment and material for household and domestic instruction free, the finished products to be the property of the school. All provisions shall be made for sanitation, light, and ventilation.

6. The directors and teachers shall take part in all extra-scholastic activities of the school and community pertaining to the improvement of school conditions. School outings and excursions of a didactic nature shall be held at proper intervals, and the children shall be required to keep diaries and records of the same, examined and graded by teachers, samples of which shall be forwarded ultimately to the director general of primary education.

7. Every graded school shall maintain a circulating library, a branch of the Mutual Loan Society, regularly organized according to law, school lunches, and facilities for dressmaking and tailoring. Anthropological measurements of each child shall be taken upon entering and leaving school. A committee of teachers shall, so far as possible, give motion pictures and lectures and hold conferences, local and district, and maintain international correspondence with teachers of other countries.

8. Special provisions shall be made by the director and teaching force for the instruction of adults by lectures and special courses in mathematics, languages, drawing, and the rudiments of science, keeping always in view the needs, predominant industries, etc., of the locality. Qualified persons in the community shall be called upon by the director to confer with him informally at least once a month upon civic matters as related to the schools, especially those touching callings and industries into which pupils are most likely to enter. The duties and powers of the director of classes for adults shall be similar to those he possesses in the day schools.

In these provisions, taken as a whole, is seen a uniform advance toward an efficient correlation of the administrative parts of the system; an enlarged social and civic activity by the teaching force, with articulation of primary education with community life; an enrichment of the content of the schools, and, inclusive of all these, a scientific attention to the physical and recreational upbuilding of the children. It is to be hoped that the financial provisions to make the decree effective will soon be made.

PRIVATE SCHOOLS.

In 1916 the total number of schools privately founded or maintained by private aid, assimilated to the national schools and subject to governmental supervision, was 6,367; the great majority are those founded, maintained, and taught by the religious orders. They enjoy almost entire freedom in courses and methods, the inspection of them required by law being usually restricted to their sanitation and training in ethics. Of private schools not under religious control, conducted wholly or in part in English, French, or German, and intended primarily for children of foreigners, there were 116. The latter are naturally grouped in commercial and diplomatic centers and are largely patronized by the children of the noble and wealthy few, especially those not in sympathy with the new social and political order in Spain.

Some of the schools founded by private benefactions and closely assimilated to the national primary schools are excellent and progressive, the salaries paid being far above the average for the Government schools and the buildings and equipment modern and sanitary. A sample of this type of school is the group entitled "La Colonia Garcia Diego," situated in the city of Cordoba. It pays teachers \$270 the first year and guarantees periodical increases of \$25 up to \$500, with retirement at 65 years at \$250 and a modern dwelling. Such teachers are also under express obligation to serve the community, being required to impart instruction to adults, men and women.

Other private schools are above the average in progressiveness and efficiency. A number distinctively secular show the influence of Ferrer's life and pedagogical teachings, which, exercised as they were in the city of Barcelona, in the 10 years preceding his execution

in 1909, could not but have their influence. Especially in their practice of coeducation as a preference, they have been imitated by the schools of republican and socialistic tinge.¹

Most noteworthy among the schools conducted avowedly under religious influences, but not by members of an order, are those commonly called, from the name of their organizer and teacher, a former barrister and student of social problems, the "Siurot System," though their official title is "The Schools of the Sacred Heart." They are located in the town of Huelva, in the Province of Andalusia, and enroll 1,000 boys. Maintained by private and voluntary subscriptions, they are housed in buildings of the plainest character, originally a seventeenth century convent; but sanitation, fresh air, and good food are regarded as essentials. They proceed entirely upon the theory of the predominant importance of the graphic method of instruction, with its appeal to the pupils' imagination and interest. Mind and memory are cultivated and stimulated by the dramatic and skillful use of the pupils themselves as material.

The cement-floored basement is marked off into squares, each pupil having his own allotment of space on which to reproduce material both from blackboard demonstration and of original design. The application of the method to the several subjects taught is of interest. In geography the traditional start is made with the physical elements; the unique feature is the intensive and leisurely study of the large contour map of Spain, modeled in cement. Thorough familiarity with this is absolutely prerequisite to the pupil's passing on to the large line map drawn upon the wall. The next step is to fit into the setting of coast, plain, hill, and mountain the centers of population, accompanied by the exposition of reasons for original settlement, and the local productions and industries. Then comes the study of political and civic divisions, with means of intercommunication. Historical connections are always woven in, often without the pupil's realizing that he is learning anything outside of geography. The hour of examination upon the morning's instruction, so far from being a dreaded burden, becomes by the aid of games a diversion. Each boy as he takes part calls out the name of some place, person, or event connected with the country selected, or if the method of debate is adopted, the detailed facts of instruction become vitalized by the personal interest and emotions of the pupil. Spanish history connects with geography by the use of the physical geography divisions already established. Pupils representing the succession of tribal and racial groups that entered Spain take positions agreed upon after preliminary study, and depict the resultant conflicts, fusions, readjustments, and ethical, governmental, and economic

¹ The Life of Francisco Ferrer, by Wm. Archer (1911), pp. 248-8; *La Escuela Moderna*, by Fr. Ferrer published by the Ferrer Association (1912).

results. Similarly, period after period of Spanish, mediæval, and modern history is portrayed, involving the wider study of nations affected by contact with Spain and Spanish civilization. The claim is made for this unique method of historical instruction that it results in the desire on the part of the pupil to read all that can be secured outside the school bearing on historical events. In arithmetic the graphic method begins with homely proverbs, such as *Cada oveja con su pareja* (Birds of a feather flock together), and applies the principle of likeness to the four basic processes of this subject. Thence the pupils proceed to play at being units, tens, dividends, quotients, etc., applying the same methods of visualization on through the more complex stages into geometry and algebra.

The results on the sides of morals and behavior accruing from the training in these schools are reported as being even more noteworthy than those on the mental side. Accounts of the condition of the prospective pupils at the time of the inauguration of these schools represented them as at a low stage, which, indeed, culminated in such scenes as to cause Sr. Siurot himself, then an advocate in good practice, to abandon his profession and devote himself to so vital a task as the reclamation of these future citizens of Spain.

These schools early attracted the favorable notice of the minister of public instruction, and, encouraged by English visitors, accommodations have been provided for the training of 30 teachers in this method. International educational arrangements with France and England are contemplated whereby this system may be studied and its practical features carried as "an educational evangel to other countries."

ENROLLMENT IN PRIMARY SCHOOLS.

The total enrollment in the national primary schools for 1916 was estimated at 1,712,261, and the average attendance at approximately 1,133,557, a percentage of 67. This enrollment of less than one and three-fourths millions on an estimated general population of twenty millions is disproportionately low. The absence of a provision in the school law definitely fixing the compulsory school age renders any treatment of this subject unsatisfactory. The total enrollment in the private primary schools of all kinds is estimated at 300,000. No figures are available for attendance, but it is fair to assume that the percentage is higher than for the national schools, because of the greater interest of their patrons, as evidenced, among other things, by willingness to pay fees for instruction.

The discrepancy between the enrollment and the attendance figures in the national primary schools may, in some degree, be explained for the capital cities of the most populous Provinces by the existence of the private schools above mentioned. The city of

Barcelona may perhaps be taken as a fair example of this situation. In this city a unique legal arrangement exists whereby private schools are subsidized by the *ayuntamientos* but not counted as belonging to the public-school system. On the city's estimated school population of 82,000, only 16,000 children are enrolled in the national schools of all kinds. The attendance on private schools of all kinds was estimated at 50,000. This leaves 16,000 children of school age still unaccounted for, and in the most progressive city of the Kingdom. Speaking for the Kingdom at large, it is estimated that a total of from two to three million children of school age receive no instruction whatsoever.

Nonattendance, or poor attendance, of children enrolled in the rural primary schools is assumed by all the educational writers of Spain.¹ Teachers complain of the unwarrantable extension by the school administrators of the radii of school districts. Others emphasize the almost insuperable difficulties country children have in reaching schools and the disastrous physical effects upon them of the lack of school lunches and facilities for drying clothes and shoes. They blame the rotation of farm work for the recurrent periods of absence and indifference and the call of the industrial centers for children workers from the tenderest years.

The local *ayuntamientos*, also, with whom rests all financial responsibility for the schools, are blamed by teachers and inspectors for neglect of manifest duties as regards both the selection of school sites and the upkeep of the schools after they are established.

COST OF NATIONAL PRIMARY EDUCATION.

The total amount expended by the Government upon national primary education in 1917 was \$6,894,235, a slight decrease from that for 1916 but an increase of 33½ per cent since 1902. On the basis of a population estimated in 1917 at 20,875,844, this was an expenditure of 34 cents per capita, or for each child of school age, \$4.28.²

By the law of 1902 local *ayuntamientos* were empowered to appropriate annually from local taxes additional funds for the maintenance of necessary assistant teachers and for the upkeep of the schools, the same to be applied for by the juntas and approved by the provincial inspectors. Statistics are not available as to the extent to which the *ayuntamientos* have availed themselves of this law.

¹ Silló y Cortés, in the chapter *La Escuela Pública*.

² It should be borne in mind, however, that this calculation takes account only of the few more than one and one-half million children enrolled, and not of the even larger number who, it is claimed, should be enrolled but are not.

SANITATION AND HEALTH OF SCHOOLS.

In all Provinces schools of insanitary conditions are reported. Those of the Balearic Isles make the best showing; those of Barcelona, both city and Province, the worst, with more than 640 reported in bad condition. In the city of Madrid there are 59 municipal schools combining conditions both unhygienic and unpedagogical, and the Province of Madrid has 256 such schools. It is difficult to fix responsibility for the physical condition of school buildings, because comparatively few of the latter are owned by the State. In 10 Provinces no school buildings are reported as owned by the State, and most Provinces report only very few. Accurate statistics are not available. The estimate is based upon informal reports of teachers that at least 15,000 schools in Spain constitute a menace to the health and life of the children attending them.

There is scarcely a Province in which the children of all of the schools are vaccinated. The record is unsatisfactory throughout the Kingdom. Even the city of Madrid has five schools in which few, if any, of the children have been vaccinated. There are, however, legal and municipal regulations requiring vaccination.

By royal decree of December 21, 1917, school medical inspection was established in Madrid and Barcelona, and an institute of school hygiene was founded at Madrid. This is to be directed by a council of which the director general of primary education shall be chairman. It is composed of the inspector general of the medico-scholastic division, of the secretary of the institute, and of members chosen from teachers of upper normal schools, the faculties of medicine and pharmacy, the Academies of Medicine and Natural Sciences, and the Higher School of Architecture. Upon the publication of the decree, the institute was required to organize the following courses: Paedology; care of children; school hygiene; anthropology and physiology of the abnormal; digestive system of children. Only 30 attendants upon each course were to be accepted. If there should be more applicants the preference would be given physicians and principals of schools. Reports from the individual instructors were to be required; and these, collected by the director general for a number of years, were to constitute a valuable aid to hygienic progress in Spain. This composite report is to be transmitted every year to the minister of public instruction. The institute is to cooperate in every way with teachers and municipalities. The institute will also be further charged with the organizing of meetings and conferences of a scientific and popular character, in order to diffuse a knowledge of the fundamental principles of hygiene among the general public.

The law of September, 1913, requiring the competitive selection of medical and dental officers for inspection of national schools in

Madrid had ceased to be executed. It was revived by the public-spirited physicians of Madrid, who in September, 1917, waited upon the minister of public instruction with the request that he enforce it. The apparent partiality shown Madrid, however, aroused the executive committee of the National Association of Teachers to protest against the spending of considerable sums in inspection which had much better be used in preventing diseases by providing fit school sites and buildings of a hygienic and pedagogical character, and paying teachers salaries enabling them to live in comfort and self-respect.

The seventh annual award of prizes was announced in 1917 by the executive committee of the Spanish association for the protection of infancy and the suppression of mendicancy, for the best work along the following lines:

Five prizes of 280 pesetas each to rural physicians distinguished for work in behalf of mothers and children; ten of 200 pesetas each for teachers of rural schools or private teachers distinguished for social and protective work; five of 200 pesetas each and a certificate for the author of the best unpublished monograph on the popularization of schools; a prize of 500 pesetas for the author of 12 drawings in color best illustrating a historical anecdote or short narrative, in prose or in poetry, for the instruction or recreation of children.

MINIMUM CURRICULUM OF NATIONAL PRIMARY SCHOOLS.

The minimum curriculum prescribed by law for the national primary schools is as follows:

1. Christian doctrine and sacred history.
2. Spanish, reading, writing, composition, and grammar.
3. Arithmetic, geometry, and drawing.
4. Geography, history of Spain, elements of national law.
5. Elements of physical and natural sciences, physiology, hygiene, agriculture.

In the schools of Madrid, Barcelona, Santiago, and Malaga, singing, manual arts, and physical training are also compulsory.

These subjects are divided into two grades, elementary and higher, of three and five years, respectively.

There is, of course, wide diversity in the methods and the extent to which the five nationally prescribed subjects are taught. In some Provinces, and in districts of certain Provinces, the law is indifferently executed. According to the report for 1916-17 of the director general of primary education, 35 Provinces have no religious instruction maintained at the expense of the State. On the contrary, Navarra has 46 teachers of religion, Barcelona 14, and Madrid 22, paid in whole or in part from the national treasury.

EXTRA-SCHOLASTIC ACTIVITIES.

As has been seen, a provision of one of the royal decrees of 1918 prescribed periodical outings or school excursions for every national school in the Kingdom, requiring that they be conducted under the supervision of the teacher, or, in the case of a graded school, of the director, and that each pupil prepare a diary or formal account of the same, to be submitted to the teacher, and, if of merit, to be forwarded to the inspector, and by him to the director general of primary education. Akin is the revival of the decree of the Queen Regent (1892) establishing "La Fiesta de la Raza," the celebration by the schools of October 12, the anniversary of Columbus's discovery of the New World under Spanish auspices, observed by many of the Spanish American countries, whose purpose is to keep alive the remembrance of racial and filial ties. Latitude is also given the individual teacher and director to hold local holidays of a religious and patriotic nature.

A decided movement for the establishment of open-air schools in many of the centers has been perceptible. Madrid has several of these, encouraged by the educational and civic authorities, though as yet in the experimental stage. One is noteworthy as embracing six grades, enrolling 216 pupils, and providing midday lunches, gymnastics, and playground facilities.

The school lunch room has been instituted in a few of the larger cities¹ and in scattering Provinces. Branches of the society as established by law are annexed to the schools of most of the cities and the more progressive Provinces.

The system of circulating libraries under the director general of primary education was established in 1912 by royal decree, intended primarily for teachers and pupils of the primary schools. Fifty libraries, 48 in the Provinces and 2 in Madrid, compose the system. Each consignment of books coming to the schools of a Province in succession is under the direct management of the primary teacher in charge of the school.

In September, 1918, was held at Monriza perhaps the first exhibition of school work in Spain done by individual teachers and groups of pupils of the national primary schools of the Province. It consisted of designs and executions of manual arts, free-hand drawings, maps, geometric designs, weaving, and embroidery. It was visited by large numbers of people of all classes, and evoked enthusiastic interest.

¹ The first system of school lunches in Spain was initiated in Madrid in 1902, with two in operation furnishing 9,000 meals for the school year; in 1906, six furnished 150,000 meals; in 1911, eleven furnished 160,000 meals.

TEACHERS, SALARIES, AND PENSIONS.

In 1916 the national primary schools of Spain were taught by 13,034 men and 11,755 women, showing a larger number of men than women engaged in primary teaching. In the non-national primary schools, of a private and voluntary nature, a total of 8,124 men and women were teachers.

In any serious study of the teachers of a system, next in importance to the consideration of qualifications comes that of salaries. This has been touched upon in the introduction. The inequalities of the present scale of salaries are shown by the fact that less than 600 teachers receive from \$700 to \$2,300; 6,700 teachers receive from \$220 to \$300; 14,423 teachers receive \$220 and less.

An agreement was reached in October, 1918, by the ministry headed by Count Romanones, which fixed the maximum salary for teachers in primary education at \$1,000, and the minimum at \$300. The important exception, however, was made that nearly half the salaries of primary teachers should be left at \$250, inasmuch as this class is limited in their rights to promotion by the organic law of public instruction. Even this is encouraging when it is recalled that the great majority of this class have hitherto received only about \$125. The new salary scale applies to men and women without discrimination, and is as follows:

50 teachers receive \$1,000.
100 teachers receive \$900.
150 teachers receive \$800.
300 teachers receive \$700.
600 teachers receive \$600.
1,500 teachers receive \$500.
3,000 teachers receive \$400.
9,000 teachers receive \$300.

The remaining teachers, approximately 10,000 in number, receive \$250. Provisions are appended by which many teachers secure additional fees by extra teaching in adult classes, and still others may obtain admission to the \$300 class by passing examinations for promotion.

Akin to the matter of salaries is, of course, that of retirement age and pension. The activities of local branches of the National Teachers' Association and Sr. Alba's progressive labors bore fruit in the royal decree of May 2, 1918, by which the retiring age of Spanish teachers was fixed at 70 years; the pension fund was nationalized; the assessment on each teacher's salary for the national fund was reduced from 10 to 6 per cent per annum. From January 1, 1919, retired teachers are to enjoy a pension equivalent to two-thirds of the maximum salary received for two consecutive years; widows and

minor orphans are to receive two-thirds of what the deceased relative would have received.

In the matter of the professional training of primary teachers, Spain has made creditable progress within the past few years, thanks to the activities of the normal schools. As related to them, the subject will be resumed later. Taking into account the many obstacles confronting it, the primary school system of Spain shows gratifyingly few teachers without professional training of some kind. True, in the case of the older teachers who antedate the present normal schools, this training is very slight, and no claim is made that it is abreast of modern demands; but the fact remains that decidedly less than a thousand teachers at present wholly lack professional training. The Province of Leon with 160 untrained teachers has most; eight Provinces show fewer than 30 each. In eight others all teachers receiving salaries out of the national treasury are trained and hold certificates.

NORMAL SCHOOLS.

The royal decree of 1902 reorganized the normal school system, putting it under the control of the minister of public instruction and the director general of primary education, and outlining the following types: (a) Two central normal schools in Madrid, one for each sex, requiring for entrance, that the student shall have reached the age of 18 years and have passed satisfactory examinations upon the subjects embraced in the courses required in the provincial normal schools. The aim of these central normals is to prepare teachers for normal schools and for directors of graded schools. A normal academic course of a year as provided includes religious instruction, ethics, church history, anthropology, and elements of pedagogy, social economy and school legislation, Spanish literature, English, or German. The regular course covers two years and embraces the following subjects: Spanish and universal literature, religion and ethics, sacred, Spanish, and universal history, advanced geography, Spanish and general, physics, chemistry, physiology and hygiene, elements of general law, school legislation, French or English, penmanship, manual arts, gymnastics, drawing, and singing. For women, household arts and expression are substituted for manual arts. Observation of methods of teaching in the annexed practice schools is required every year, and intensive study and practice of teaching the last year.

(b) District higher normal schools, one in each university district, requiring students, if men, to have reached the age of 18 years, if women, that of 17 years, and to have passed satisfactory examinations upon the subjects required in the courses of the elementary normal schools. The aim of these district normal schools is the same as that for the central normal schools. The course covers three years,

and includes the following subjects: Elements of the physico-natural sciences, mathematics, geography, history, Spanish, pedagogy, French, ethics, religious instruction, manual arts, singing, and drawing. In the normal schools for women, music and household economy are added.

(c) Elementary normal schools, numbering at least one for each sex in each Province, requiring for entrance that the student shall have completed the sixteenth year of his age, or be exempted by the director of the normal, completed the subjects offered in the schools of primary education, and passed the following examinations:

1. The preparation of a paper or document upon a subject assigned by the examining board; an exercise in writing from dictation; the solution of a problem in arithmetic.

2. The reading aloud of a selection of prose or poetry, giving a summary of the sense.

3. Correctly answering questions upon Christian doctrine, sacred history, Spanish grammar, and arithmetic.

The aim of the provincial elementary normal schools is to prepare teachers for schools of primary education, one-room, graded, and mixed. The subjects are embraced in a two or three years' course, and are as follows: Christian doctrine and sacred history, penmanship, physics and chemistry, natural history, and manual arts, physiology, hygiene and gymnastics (for women, domestic arts), pedagogy and practice teaching, with rudiments of school law. In view of the urgent demand for teachers in primary education, these courses are so arranged as to allow some students to complete certain of them in January and others in June; and some to enter in February and others in September. The 43 elementary normal schools for men enrolled in 1916 a total of 8,158, of whom nearly 2,000 were admitted to teach; the 49 for women enrolled 10,531, of whom about the same number as for men were admitted to teach.

/ The efficiency of the normal school in Spain is higher than that of any other division of the educational system. For this, credit belongs largely to former Minister Bergamin, to whose changes and reforms in 1915 the present form is due. In spite of the criticism launched at his policies at the time, especially on the score of making religious instruction compulsory, giving the naming of teachers of religion to the bishop of the respective diocese, and separating the sexes, the normal structure of Sr. Bergamin has commended itself in actual practice. His ideas marked an advance in giving solid content to the training of teachers, in continuity of studies, in fostering scientific study, and in contributing to the molding of teachers who should in their turn mold in the primary schools religious and patriotic citizens.

Dissatisfaction has, however, long been felt by the progressive teachers and press of Spain with the normal schools; and this found expression in recommendations drawn up by the Association of Teachers of Normal Schools, at their meeting in Madrid in July, 1918, and presented for the consideration of the minister of public education. Their salient points were as follows:

1. The establishment in elementary normal schools of a five-year course, the first four years of which are to be of a general and cultural nature, and the fifth devoted to practical training in pedagogy.

2. The establishment of technical and middle schools with three grades for both sexes in order that pupils at the age of about 12 years may, on emerging from the primary schools, have the way plain to them to continue until the age suitable for entering normals or vocational and professional preparatory schools. Such schools already exist in Spain in preparation for schools of arts, trades, industries, and business; none have been provided for normal preparation.

3. The establishment of annexed practice schools, consisting of eight grades, six for regular primary work, one for review work, and the last for special training of retarded and abnormal children.

4. Thorough scientific training of teacher-pupils by means of practical exercise in teaching.

5. The establishment of more and better paying scholarships, and subvention of traveling scholarships.

6. The fixing of a new scale of salaries for teachers in normal schools, both men and women, with an increase of \$100 every year for 5 years, the initial salary to be fixed at \$500.

7. The taking over by the State of the buildings and equipment of all normal schools.

8. As the cardinal administrative reform, the designation of the director of each normal school by vote of its teachers, the submission of his name for the approval of the minister, and his confirmation for a term not longer than four years.

In accordance with these recommendations, a royal decree empowered the minister of public instruction to issue questionnaires to the faculty of every normal school in Spain, calling for answers to queries upon the following points, each department of related studies to deal with the questions concerning it: The number of normals necessary as based on the number, general training, educational preparation, and attitude of pupils toward the profession of teaching; size, number, condition, etc., of grounds and buildings; school equipment, scientific and pedagogical; library facilities; pedagogical exhibits and museums; relation of the individual normal school to others, to centers of education, and to provincial inspectors; annexed practice school; entrance requirements; plan of studies, how far

realized and pupils' attitude toward it; length of course; schedule and hour scheme; school dormitories and residences for teachers; good or bad results to the system from the instruction of pupils not pledged to teach.

By royal decree of 1918 there was founded at Madrid an Institution of Secondary Teaching, under the direction and inspection of the Commission for the Advancement of Studies and Scientific Research. By its provisions, lodging will be supplied all pupils. Conditions of entrance are to be set by the minister of public instruction. The course shall cover not less than six years, when fully developed, and shall have a preparatory department. The subjects studied shall be at least those embraced in the programs of secondary instruction. To be admitted to the school as a candidate for post as teacher, the student must be a Spaniard, be over 17 years of age, and have pursued, or be pursuing, university courses. The training of students shall combine three main lines of training: (1) University studies, (2) practical teaching in primary schools, (3) reading, criticism, personal and experimental work in the pedagogical seminary, studies and practice in foreign educational centers.

The suggestion is probably drawn from South America, where it was worked out first in Chile, and then in Argentina.

The establishment of supplementary courses for teachers in Oviedo, by royal decree of June, 1918, is also to be noted as the first of its type in Spain. The junta of the pedagogical conference at Oviedo had petitioned for this, and the rector's council of the university had favorably reported upon it. It was to be under the director general of primary education, and for men and women teachers of national schools, and to embrace fundamental training in educational problems, reading of pedagogical books, methodology and school organization, conferences on all phases of education, elements of physical and natural sciences, agriculture and industry, social problems and excursions. It was to be held in October and to last 15 days. One man and one woman were to be selected from each judicial district of the Province by the inspector of the district. Living and traveling expenses were to be paid.

SUMMARY: PROJECTED REFORMS.

Spain's patriotic educational leaders sincerely deprecate the popular idea that a panacea is to be found in expecting the State to initiate the necessary reforms. In marked contrast, for example, are the Scandinavian countries and England, where, as shown in the history of the Fisher bill, all desire of reform and all effective initiative is born of localized units of government and communal life, and associations of diverse kinds, private societies, etc. In all those countries

the State only gathers up the movement already initiated, fosters it, and diffuses it. As has been seen, a marked and powerful industrial revival has shown itself in Spain within the past four years. Friends of popular education unite in urging that advantage be taken of this by every agency to further education of all kinds. The perplexing problems of training in apprenticeship, and those of the technical and vocational education of the masses, should at once be taken up by local agencies and pressed upon the Government, without waiting for the latter to move.

Among the summaries of the urgent need of educational reform, and the deplorable results to Spain's national life from her indifference to hygiene in particular, perhaps the most forceful was uttered by Don Alejandro Rossello in the Cortes in May, 1918. Speaking to the report of the Commission on Education, he said:

The steady impoverishment of Spain is due in great part to the total lack of attention to hygiene. Two hundred thousand lives are lost annually that could have been saved, representing on a conservative estimate 300,000,000 pesetas (\$60,000,000). Sickness and loss of time from work represent 200,000,000 pesetas in addition. Educational authorities may no longer close their eyes to this frightful drain on the national resources, for on it hinges ultimately the welfare, even the existence, of the nation. The smaller nations are already in great danger; if the minister of public instruction has the power to protect existing industries and encourage others, surely he has the right, *a priori*, to encourage and safeguard health, the matter of the most vital importance. The number of recruits rejected by the army because of deficiency in weight and height, as reported by medical officers, and the mortality among the civil population, are appalling. To provide more and better food, and radically improved sanitation, is the plain duty of the Government; and to the Government's chief agent, the minister of public instruction, the nation looks for immediate and vigorous action. What could be more tragically absurd than that the Government should have the power to take over the nutrition and education of the youth while under arms, and yet take no heed whatsoever of it during the formative years and conditions preceding military age?

This leads inevitably to the entire question of physical education, of which there is total lack in many lines of instruction. Most important of these are the manual arts. These constitute the basis of all apprenticeship schools, of all arts and trades schools, of all polytechnic schools. * * * The aim of such schools should not be confined to the development of mere manual dexterity. The development of the brain is in close relation with that of the hand. There is furthermore a fundamentally ethical meaning, inasmuch as a just emphasis put upon labor does away with artificial social categories. * * * Spain has before this had gleams of her duty. Twenty-five years ago she sent investigators to the far-famed school of manual arts in Naas, in Sweden; they returned, arrangements were made for the systematic instruction of Spanish teachers for national schools and normals, but the movement was allowed to die, and nothing came of it. The same was true of the sending of pupil teachers to the well-known Italian school at Ripatransone. * * *

So with school and national games. Spain does not know how to play. School games, school grounds fostered by the nation, do not exist. Even the word is becoming unknown, the good old Spanish word *horuelo*. The playground of a generation ago should be restored; old national ones should be restored, and new ones should be introduced from other countries. This is of interest primarily to the working class, first because health is their capital, economically speaking, and secondly, as part

of the nation they have the duty and right to share in a complete and well-rounded education.

The development of primary schools immediately needed is that which enhances manual dexterity as an educational element, viz, the schools for apprentices. In Spain these are as yet only on paper; but they must at once be organized, as must the schools of arts, industries, and trades, and all kindred schools. The practical work of the shop must be stressed. And yet the teacher must not be merely a mechanic. Spaniards may never again, for historical reasons, be a world-governing race like the English; but they can for the self-same reasons, be a directing race in matters of the mind. France, even in time of war, set herself to the making over of her apprentice schools; and England is discussing them as one of the chief features of her pending education bill.¹

But it is still by means of the primary schools that the minister of public instruction must touch and mold the people. The Crown is already alive to the imperative necessity of constructing none but hygienic schools. If a start can be made here, it will be some offset to the appalling mortality from tuberculosis. The location of the school building is of supreme importance. A start should be made in the towns and villages which are to build schoolhouses by the appointment of a local provisional council to select fitting sites at fair prices, and to dedicate them to the school and to playgrounds and plats for garden and agricultural experiments by the pupils. Primary instruction must be radically overhauled and changed, and so of course must the form of teaching back of and beneath it, namely, the training of the teachers of the primary schools. We run the risk, more than all other countries, of useful men being attracted from teaching into the trades and better paid employments. The teachers' salary must be increased until it is fair, and will bear comparison with the pay of other skilled men and women. * * * The teachers should, if possible, have university training, or at least a part of it. They should be encouraged to go to the universities, and the universities should be required to institute a faculty of pedagogy as leaven to the lump; all teachers should attend such courses, especially those aspiring to be professors in institutes or in normal schools of four grades, inspectors, and principals of normals. The normal schools should specialize in preparing technically all pupil teachers by constant and unceasing practice in teaching from the first to the last day of their training.

III. SECONDARY EDUCATION.

INSTITUTOS GENERAL Y COLEGIOS.

Secondary education in Spain is organized along the territorial lines of the 11 university districts. The local administrative side is controlled by a rector for each university district, who is appointed by the Crown on the recommendation of the minister of public instruction, and is generally the rector of the university of that district. Cooperating with the rector is the provincial junta, of which he is a member, together with the civil governor of the Province, an ecclesiastic delegated by the diocesan bishop, a member of the normal provincial commission, a member of the *ayuntamiento* of the provincial capital, a judge of the provincial courts, the inspector of primary education, the director of the provincial instituto, and three patrons of the provincial instituto named by the minister. (Law of 1875.) Three inspectors general are required to visit periodically all institutos and to present reports to the minister for

¹ This speech was delivered before the passage of the education act, August, 1918.

transmission to the cabinet. In accordance with the legal requirement, there is in each Province at least one instituto of secondary education for boys which confers the bachelor's degree. Of these there are 58, including both general, that is, traditionally classical, and technical.

To be admitted to the studies of the instituto the student must be at least 9 years of age, and pass the prescribed examination, both theoretical and practical, in all subjects included in the course of the national primary education, before the examining board appointed by the minister. Examinations on the theoretical side must be individual; those on the practical side may be by groups, each student being required to write at dictation a simple grammatical paragraph, and to solve in writing simple problems illustrating the four fundamental rules of arithmetic.

The subjects taught in the cultural institutos cover a six-years course, and are as follows: Spanish, grammar, rhetoric, and literature; Latin and Greek; French and English or German; history, general and Spanish; geography, physical and political; cosmography, mathematics, natural history, physiology and hygiene.

The technical and commercial institutos omit Latin and Greek, and require physical sciences, accounting and bookkeeping, commercial geography, and two modern languages in their place.

By royal decree there must be for each instituto at least the following teachers: Five for the section of languages and literature; four for the section of sciences; three for the section of religious instruction, drawing, and gymnastics; and two assistants for each full section. Salaries are, of course, higher than in primary education; but no statistics on this point are available. Students completing the full six years' course of the classical instituto receive the bachelor's degree, and upon examination are admitted at not earlier than 15 years of age to the universities.

Preparatory to the cultural institutos are the annexed schools called the *colegios*, of which there are 253. In 1916 a total of 48,311 students, of whom 1,936 were girls, were admitted to both these types of secondary schools. For 1916 the cost of maintenance of the system of secondary education was a little over \$1,100,000, an increase of 48 per cent since 1902.

At a meeting of the teachers of institutos held in June, 1918, reform in the subjects taught was urged, in order that the traditional course might not be merely instructional, but educative as well. A clear division of the courses into the cultural and the scientific was also urged, with the creation of additional institutos in the populous centers. Enlargement of the teaching staff was advocated, with teachers specially trained for their subjects. Lengthening of the traditional six-year course to eight years was also advocated, by

means of the development of the courses in Spanish, science, and modern languages, and the addition of others in civic and sociological fields, in order to keep the pupil in school until greater maturity, and for the attainment of a riper and more solid culture, essential to the ability to determine special vocation and to the formation of character and personality. A 50 per cent decrease of expense for students in secondary education was also urged, and an increase of scholarship funds for residence of students in provincial capitals.

Of the special institutos (enseñanza técnica) dependent upon the ministry of public instruction, the following are most noteworthy:

1. Schools of veterinary surgery, at Madrid, Cordoba, Leon, Santiago, and Zaragoza, enrolling (1916) 2,234 students.
2. Nineteen business schools, located in coast cities and centers of population, enrolling (1916) more than 5,000 students.
3. Twelve nautical schools, enrolling (1916) 963 students.
4. Central School for Industrial Engineers; School of Industrial Engineers of Barcelona; Higher Architectural School of Madrid and Barcelona; Royal Conservatory of Music and Declamation (Madrid), enrolling (1916) 3,042 men and women.
5. School of Higher Pedagogical Studies, enrolling (1916) 470 men and women; Woman's Domestic and Professional School, Central School of Languages.
6. Thirty-one establishments for the instruction of deaf-mutes and blind, enrolling (1916) 939 deaf-mutes and 658 blind. Many are aided by religious and municipal subventions.¹

Under the head of schools of arts and industries are grouped:

Seven schools of arts and trades sustained by the State, enrolling (1916) 1,145 students.

Five schools of arts and trades with artistic and industrial apprenticeship, enrolling (1916) 6,758 students.

Thirteen industrial schools, enrolling (1916) 11,908 students.

Akin to the above group are five schools maintained by deputations and *ayuntamientos*, enrolling (1916) 4,093 students; and seven maintained by State and local authorities, enrolling (1916) 6,425 students.

The total appropriation of funds for the last three types of secondary schools was, in 1916, nearly \$700,000, or an increase of 161 per cent since 1902.

To these should be added the special schools dependent on the ministry of public works and grouped as follows:

1. Special school for road engineers, canals, and harbors, 25 enrolled.
2. School of assistants in public works, in existence only one year, 19 enrolled.
3. School of mining engineers (1916-17), 49 enrolled.
4. Schools for mine superintendents and foremen, located in seven mining centers, enrollment 55.
5. Special school of agronomy (1915-16), 29 students finished course.

¹ By royal decree of Aug. 26, 1917, there was organized within the ministry of public instruction a three-fold national foundation for the study and encouragement of the education of deaf-mutes, the blind, and the mentally abnormal.

The committee of the Cortes appointed in 1917 on the survey of educational conditions recommended that all the above extraeducational institutions, as well as the institutions established abroad, such as the Spanish College of Bologna and the Academy of Fine Arts at Rome, should be transferred from the control of the minister of public works to that of the minister of public instruction.

IV. UNIVERSITY EDUCATION.

University education in Spain, like secondary education, is administered along the territorial lines of the 11 university districts. In the rector of each university, named by the minister, is vested entire local control on the disciplinary and scholastic sides. Associated with him in an advisory capacity is the junta of full professors. The rector is responsible immediately to a designated one of the three inspectors general, to whom he must render periodical reports of the condition of the university under his charge. Likewise, the inspectors general are by law required to inspect the universities, and to render reports of their visits to the ministry for transmission to the Cabinet. Each of the universities is possessed of its own property holdings in law, donated or bequeathed to it; but the expenditure of such funds is subject to the consent of the State, and the State maintains the university by the subvention necessary each year. As has been seen, the administrative connection of the universities with the cultural instituto is very close, the same territorial lines and system of inspection prevailing for both. Preparation for the universities is the almost exclusive aim of the institutos. For entrance into the university, the student must have completed the full six years' course of the institutos, have received the bachelor's degree, and have passed satisfactory examinations upon the subjects studied in the institutos. In 1916 the 11 universities enrolled 21,300 students in all schools, cultural and professional, with slightly more than half pursuing official or prescribed courses. For that year, the appropriation for university education was \$1,316,062, nearly twice the amount for 1909.

Recommendations have been made advocating the suppression of the weaker universities, and the diversion of funds toward the strengthening of the others; their closer articulation with the general educational system, and the abolition of the exclusive connection with the institutos; the modernizing and broadening of the courses offered so as to touch the lives and careers of the youths of poor and middle-class families, and the throwing open of the universities to the people of Spain; the adoption of more rigorous disciplinary and administrative measures, with stringent requirements as to conduct and residence of students; the abolition of the present overemphasis upon formal examinations; the establishment of free election of courses; greater care in selection of professors and in attention to

their qualifications and activities; encouragement of foundation of private institutions of university rank; and university extension carried to all the agricultural and industrial points, no matter how remote.

University extension work in the Province of Oviedo, the pioneer for Spain, has continued its remarkably useful career. Free popular classes have been conducted by teachers of the normal school and the university in law, civic instruction, history of civilization, general geography, Spanish grammar and literature, elements of natural science, physics and chemistry, and practical arithmetic.

HOLIDAY COURSE FOR FOREIGNERS.

The sixth session of the vacation course for foreigners was offered during the summer of 1918 in Madrid. It is under the auspices of the minister of education, and designed primarily to offer to foreign teachers of Spanish, or to foreigners interested in Spain and the Spanish language and literature, the opportunity of continuing their studies through practical work in classes conducted by teachers in the central normal schools and professors in the University of Madrid, authorities in their respective lines. Short courses and lectures were also given on the history, arts, and social life of Spain. Excursions to museums and places of historic and literary interest were announced.

V. EXTRA EDUCATIONAL AGENCIES.

In conclusion, certain agencies not organically related to the educational system of Spain but making for intellectual progress in cooperation with it, deserve mention. Of these, undoubtedly the most active is *La Junta para Ampliación de Estudios e Investigaciones Científicas* (Commission for Enlargement of Studies and Scientific Investigations). It is composed of eminent educational and scientific experts, chosen with due regard to the diversity of intellectual and religious tendencies in the country. It supports Spanish students in foreign countries, encourages new types of educational institutions in Spain itself, diffuses knowledge of scientific progress in other countries, and encourages by subvention research along scientific and sociological lines.

As an intellectual movement, which, while it does not reach the body of the people, yet affects the rising generation in the capital city, and ultimately the administrative side of popular education, may be mentioned the Association for Woman's Education, founded in 1870. It conducts in Madrid a system of schools, primary, preparatory, secondary, and commercial, besides offering special classes in language, drawing, painting, manual and domestic arts. The business courses are this year recognized as equivalent to national schools, and pupils certificated from them are admitted to employment by the Government.

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COMMERCIAL EDUCATION

By

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SUPERINTENDENT OF CITY SCHOOLS
BOSTON, MASS.

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COMMERCIAL EDUCATION.

By FRANK V. THOMPSON,

Superintendent of City Schools, Boston, Mass.

CONTENTS.—Development of commercial education in public schools—Federal Board for Vocational Education: Provision for commercial education—Report of the Committee on Business Education: Commission on the Reorganization of Secondary Education—School surveys and commercial education—Conclusion.

The influence of industrial vocational education is having its effect upon practices and methods of commercial education. The practice of industrial education of analyzing a curriculum of subjects containing values of vocational work, related vocational, and non-vocational subjects is causing us to examine commercial education with a view to a more careful practice with respect to like items. We are accustomed to note a large proportion of our high-school pupils as pursuing commercial education. More strictly speaking, however, commercial pupils in our high schools are those pursuing general academic education with one or two commercial subjects, usually of clerical character. There has been little related commercial work required of our so-called commercial pupils and the nonvocational or general academic subjects have been taught with complete disregard for the special needs of commercial pupils. A review of the historical development of commercial education easily explains the present situation.

In the early days before the period of vocational education, no provision was made in educational curriculums for the training of boys and girls for office work or other commercial occupations. The private business school was first to see the need of a new training and to effect an organization to meet this need. These institutions offered short intensive courses in bookkeeping and later in typewriting and shorthand. The history of the private commercial school is well known. This type of school rendered a real service at a time when the public-school authorities were either ignorant of the need or unwilling to meet it. The original commercial courses in public high schools were short intensive courses. This kind of organization immediately called down upon commercial educators severe criticism from those who were charged with the responsibility of administering public education, and from the public in general which was at that time quick to reflect the idealism and aloofness

from life character of all educational enterprise. The natural result of this widespread criticism was to shake the faith of the commercial teachers in the type of training which they had received—that is, private commercial school training—and were recommending for the public school. It was not long before these teachers of commercial subjects began to play up to the academic standard so esteemed in the new educational fields in which they were workers, with the ultimate result that in the average high school commercial education simply represented a number of commercial elective subjects grouped with academic electives and distributed throughout the four-year program.

Under the average conditions of high schools a few of these commercial subjects could be taken, and under the most favorable conditions many such subjects could be elected. It can be seen readily that this elective plan could effect no standard of commercial instruction, and as a result the product ranged all the way from reasonably efficient to wholly inefficient. Commercial pupils under this plan lacked the thoroughness and attention which vocational pupils in more modern vocational courses attain. By the compromise described commercial educators succeeded in winning a place among educators in general, and were able to advance the cause of commercial education in a system not attempting any other kind of vocational work.

In a subsequent period of educational development two years of commercial work were offered at the end of the high-school course. Only those who were able to continue through the four-year program were permitted to get commercial training. The result of this type of commercial course was that the large majority of boys and girls who had any claim on public commercial education were denied the privilege of getting it. The private commercial school waxed fat on this public-school program.

The evolution of commercial education seems to be bringing us at this moment to a new and better conception of proper procedure. We are now attempting to meet the needs of boys and girls who attend high school in large numbers for the first two years, and who desire instruction in commercial subjects, by placing commercial work at the beginning of the course, but adapting this work to the stage of maturity of the younger pupils. The more technical and difficult commercial subjects are postponed to the latter part of the high-school course. Such a plan seems to meet more adequately the needs of all the pupils who resort to our high schools looking for the advantages possible under the limitations of time, capacity, and maturity.

Our first-year high-school commercial work consists mainly of commercial arithmetic, penmanship, and elementary bookkeeping. In our second-year work are found more advanced bookkeeping,

typewriting, and simple office procedure. Stenography and still more advanced bookkeeping are reserved for the third and fourth years. In junior high schools commercial subjects are generally taught upon a prevocational basis. Many junior high schools in their efforts to furnish fullest opportunity for those pupils who will not proceed to the senior high school are offering somewhat technical and advanced courses in stenography and bookkeeping, too advanced for the pupils who pursue the courses.

To summarize the present stage of development of commercial education in our public high schools, it may be said that the present is a period of earnest and rapid readjustment. Mistakes and failures of the past are recognized, and earnest effort is made both to make the courses suitable to the ages and capacities of pupils and for the purpose of making most valuable the opportunities for commercial instruction for all pupils, irrespective of their educational limitations and vocational destinies.

One of the most hopeful signs of a more adequate conception of the province of commercial education is the recognition that there are many commercial occupations other than those of bookkeeper and stenographer; that no boy or girl should be encouraged to apply for, or to accept, any position for which he or she is not qualified by maturity, general education, and special training; that the special aptitudes of boys and girls should be taken into consideration in determining the kind of position for which each one should be trained, and that new types of commercial education must be developed to meet newly discovered needs in the field of business training.

As an illustration of the recognition of commercial occupations other than clerical may be mentioned the subject of retail selling. In no field of commercial education is there greater activity or need for educational facilities than in that of retail selling and retail store service. In the immediate future plans for meeting this need should be developed. This attempt will mean the development of a new department of business education, with specially qualified teachers and with methods of procedure specifically adapted to secure the ends sought.

At the present time many cities are experimenting with courses in salesmanship, or, better named, retail selling. It would appear that the procedure of industrial vocational education had more in the way of suggestion for courses in retail selling than have our older courses in clerical practice. We have seen that our long-established commercial education has followed the academic procedure of the high school in teaching commercial subjects without field practice. Those best qualified to judge consider that salesmanship can not be effectively taught from textbooks alone unsupplemented by actual practice under supervised conditions. We can not expect that salesmanship can

develop as rapidly and with the same facility that clerical commercial education has shown.

During the conditions of war and the stimulation of the labor market, the need for clerically-trained commercial workers has been more apparent than that of other commercial occupations. The wages offered for clerical workers has grown with the unusual demand. This condition may be expected to retard for the present the development of the teaching of salesmanship. Even under normal conditions the teaching of salesmanship has been involved in the social prejudice which seems widespread, namely, that the commercial employment of selling goods does not equal (in the minds of pupils and parents at least) the social grade that clerical workers enjoy. Particularly with girls the vocational motive is as apt to be found in social esteem as in the wage offered. Employers of labor seeking trained sales people will need to do much in the way of affecting public opinion concerning the worth and dignity of the sales person before our pupils in public schools may be expected to elect training in salesmanship in preference to the present esteemed clerical occupation. Various investigations such as Cleveland and Minneapolis have shown that selling is more seasonal in character than in clerical work. However, any analysis of the process of selling will show that it is an art for which training may be offered as truly as that of clerical occupation, but as long as there is keen competition both in wages and in social esteem among various commercial occupations, we may expect that boys and girls will still resort in greater numbers to the long established and tried clerical occupations.

FEDERAL BOARD FOR VOCATIONAL EDUCATION.

PROVISION FOR COMMERCIAL EDUCATION.

Among the several assistant directors for various types of vocational education is found provision for a specialist in commercial education. F. G. Nichols, formerly director of commercial education in the city of Rochester, N. Y., has been appointed to carry on this function. Commercial education may expect from a new national source advice, guidance, and assistance, limited heretofore in this country. It is expected that a State supervisor of commercial education will be appointed in each State; such a supervisor to be accountable to the assistant director of commercial education on the staff of the Federal Board for Vocational Education in Washington.

We may expect that the character of teachers' qualifications may be formulated as the result of the new organization of forces. A better training for commercial teachers would seem probable both as the result of stimulation and advice of the national director, and also from the possibility of national funds which seem possible under

the Smith-Hughes law. We are informed that certain kinds of commercial work where the vocational conditions are assured may receive the same subvention that does industrial vocational work. For example, commercial pupils who take cooperative courses and work at intervals in the school and in the vocation under conditions of approval as to the character of the course may constitute a group for which national moneys can be granted. Courses in salesmanship, such as those maintained in Boston and Cleveland, may petition and likely receive the same proportion of national funds for such kinds of commercial education as do courses in improved industrial education.

REPORT OF THE COMMITTEE ON BUSINESS EDUCATION.

COMMISSION ON THE REORGANIZATION OF SECONDARY EDUCATION.

In 1903 the National Education Association issued a brief report on commercial education, the chief feature of which was a recommendation of a commercial curriculum for general high schools. Since that date the association has offered no formal statement upon the subject of commercial education.

Two years ago a committee consisting of Dr. Cheesman A. Herrick, president of Girard College, Philadelphia; F. G. Nichols, formerly director of commercial education, Rochester, N. Y., now assistant director of commercial education, Federal Board for Vocational Education; and F. V. Thompson, superintendent of schools, Boston, formulated a report now under revision by the reviewing committee on the Reorganization of Secondary Education of the National Education Association.

The report emanating from this committee can not fail to receive marked attention, due to the keen interest in the question of readjustment of commercial education now dominant in the minds of our administrators of secondary schools.

No one who is familiar with the pronouncement of the National Education Association, in 1903, regarding the course of study can fail to see the progress and expansion of commercial education when comparing the single inflexible, largely academic course of 1903 with the manifold flexible courses formulated at the present time. As an illustration of the modern development of commercial courses of study, the commercial curriculum for cosmopolitan high schools, adopted by Boston in 1917, is offered below. It will be noted that the commercial curriculum is divided into three distinct sections in the third and fourth years of the course. Commercial pupils by such a curriculum can specialize either for the accounting or bookkeeping side of commercial occupations, or for the stenographic, or for the vocation of selling.

COMMERCIAL CURRICULA.

(To meet all requirements for commercial certificate.)

FIRST YEAR.

Required subjects.	Points.	Elective subjects.	Points.
Physical training I.....	2	History I.....	3 or 5
Choral practice.....	1	Foreign language I.....	5
Hygiene.....	1	Biology I.....	3 or 4
English I.....	5	Introductory science.....	3
Bookkeeping I.....	4 or 5	Drawing I (freehand).....	3
		Domestic art I.....	3

SECOND YEAR.

Required subjects.	Points.	Elective subjects.	Points.
Physical training II.....	2	Choral practice II.....	1
English II.....	4 or 5	History of commerce.....	3
Bookkeeping II.....	4 or 5	Foreign language II.....	4 or 5
Commercial geography.....	3	Mathematics I.....	5
		Biology II.....	3 or 4
		Drawing II (freehand).....	3
		Domestic art II.....	3

THIRD YEAR.

NOTE.—At least one elective in the third and fourth year must be a "Controlled Option" (a related vocational subject taught in a homogeneous division).

Accounting.

Required subjects.	Points.
Physical training III.....	2
English III.....	3 or 4
Bookkeeping III.....	4 or 5

Elective subjects.

Choral practice III.....	1
Phonography I.....	5
Typewriting I.....	3
Merchandising I.....	4 or 5
Civics.....	3
History III.....	3, 4, or 5
Foreign language III.....	4 or 5
Physics I.....	3, 4, or 5
Chemistry I.....	3, 4, or 5
Drawing III.....	3
Domestic art III.....	3

Secretarial.

Required subjects.	Points.
Physical training III.....	2
English III.....	3 or 4
Phonography I.....	5
Typewriting I.....	3

Elective subjects.

Choral practice III.....	1
Bookkeeping III.....	4 or 5
Merchandising I.....	4 or 5
Civics.....	3
History III.....	3, 4, or 5
Foreign language III.....	4 or 5
Physics I.....	3, 4, or 5
Chemistry I.....	3, 4, or 5
Drawing III.....	3
Domestic art III.....	3

Merchandising. (Retail selling.)

Required subjects.	Points.
Physical training III.....	2
English III.....	3 or 4
Merchandising I.....	4 or 5

Elective subjects.

Choral practice III.....	1
Phonography I.....	5
Typewriting I.....	3
Bookkeeping III.....	4 or 5

Elective subjects.	Points.
Civics.....	3
History III.....	3, 4, or 5
Foreign language III.....	4 or 5
Physics I.....	3, 4, or 5
Chemistry I.....	3, 4, or 5
Drawing III.....	3
Domestic art III.....	3

FOURTH YEAR.

<i>Accounting.</i>		<i>Secretarial.</i>	
Required subjects.	Points.	Required subjects.	Points.
Physical training IV.....	2	Physical training IV.....	2
English IV.....	3, 4, or 5	English IV.....	3, 4 or 5
Commercial law ¹	3	Phonography II.....	5
Bookkeeping IV.....	4 or 5	Typewriting II.....	3
Office practice.....	2 or 3		
Elective subjects.		Elective subjects.	
Choral practice IV.....	1	Choral practice IV.....	1
Phonography II.....	5	Commercial law ¹	3
Typewriting II.....	3	Bookkeeping IV.....	4 or 5
Merchandising II.....	4 or 5	Office practice.....	2 or 3
Economics ¹	3 or 4	Merchandising II.....	4 or 5
Foreign language IV.....	4 or 5	Economics ¹	3 or 4
History IV.....	4 or 5	Foreign language IV.....	4 or 5
Civil service.....	3	History IV.....	3
Drawing IV.....	3	Civil service.....	3
Domestic art IV.....	3	Drawing IV.....	3
		Domestic art IV.....	3
<i>Merchandising.</i>		<i>(Retail selling.)</i>	
Required subjects.	Points.	Elective subjects.	Points.
Physical training IV.....	2	Phonography IV.....	5
English IV.....	3, 4, or 5	Typewriting IV.....	3
Merchandising II.....	4 or 5	Economics ¹	3 or 4
Elective subjects.		Foreign language IV.....	4 or 5
Choral practice IV.....	1	History IV.....	4 or 5
Commercial law ¹	3	Civil service.....	3
Bookkeeping IV.....	4 or 5	Drawing IV.....	3
Office practice.....	2 or 3	Domestic art IV.....	4

COMMERCIAL COURSE CERTIFICATES.

A candidate for a commercial certificate must have completed a full course of training in at least one of the three vocational groups—i. e., accounting, secretarial or merchandising, with a grade not less than B in any subject of the group.

SCHOOL SURVEYS AND COMMERCIAL EDUCATION.

Since the last report of the Commissioner of Education on commercial education, a number of surveys have been made, notable among them being those of Cleveland, Minneapolis, and Indianapolis. In general, these surveys bear out the position of the Commissioner of Education's Report of 1915-16. As an instance of this, the survey in Cleveland draws a parallel between the actual commercial vocations found in that city and the public provisions for training workers in commercial occupations in the public high schools of the city. The situation depicted contains no surprises for those who are familiar with what was revealed in New York City by the Hanus inquiry of 1912.

¹ In schools requiring both commercial law and economics, the former may be taken in the third year.

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DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 19

ENGINEERING EDUCATION

By

F. L. BISHOP

DEAN, SCHOOL OF ENGINEERING, UNIVERSITY
OF PITTSBURGH

Advance Sheets from the Biennial Survey of Education
in the United States, 1916-1918



WASHINGTON
GOVERNMENT PRINTING OFFICE
1919

ENGINEERING EDUCATION.

By F. L. BISHOP,

Dean, School of Engineering, University of Pittsburgh.

Engineering schools in common with other educational institutions have been confronted with many unique problems since the outbreak of the European War in 1914. Previous to that time an increasing number of men who entered colleges and universities elected subjects pertaining to commerce, business management, finances, etc. The growth of the schools of commerce, both as regards the number of such schools and the attendance in them, is a striking proof of this tendency. During the same period the attendance at engineering schools had in most cases decreased with the resulting decrease in new equipment, faculties, etc. This is partly accounted for by the financial crisis of 1907 but is undoubtedly due largely to the fact that the opportunities offered college graduates in purely commercial pursuits were greater than those in purely industrial work where the demand is for men having a high degree of engineering skill and a wide knowledge of applied science.

With the demand on American manufacturers for war supplies for the Allies, there developed a need for a very large number of scientifically and technically trained men for use in designing new machinery, developing new processes, etc. It was then the country realized that the number of men who had been trained in applied science was woefully small in comparison with the population of the country and the magnitude of its industries. Even before this time the engineering graduate received numerous bids for his services. In spite of this the idea was prevalent that the supply of engineering graduates exceeded the demand.

The increasing number of mechanical appliances developed as a result of the European War, necessitating an increased number of trained men in applied sciences, immediately reacted upon the engineering schools in two ways,—first, the number of men entering engineering schools increased materially, and second, the professors and instructors in these schools were in demand by the industries at salaries which it was impossible for educational institutions to meet. For the latter cause many of the teachers left the engineering schools and their places had to be taken in most cases by inexpe-

rienced teachers and almost without exception by men with less technical ability than those who had left.

This movement of engineering teachers was further accelerated when the United States declared war on Germany, due to the fact that many members of engineering faculties were called into active service as members of the Officers' Reserve Corps and the Enlisted Reserve Corps of the United States Army.

No better tribute can be paid the personnel of the teachers in engineering schools than their immediate response to their country's call.

The entrance of the United States into the war affected the student body in two ways—first, an increased attendance in the freshman class; the second and most striking was the large number of students who immediately volunteered in the various branches of the service.

This depletion of the student body of engineering schools through its members volunteering for active service in various branches of the Army and Navy was a matter of grave concern not only in educational institutions and the industries, but also to the War Department.

It had been recognized from the very beginning of the war, not only by the Secretary of War but by other officials in Washington, that the successful outcome of the war for the Allies was dependent upon the services of technically trained men. If the war were to last a year or perhaps two, all were agreed that every student should do his part by dropping his school work temporarily, but if the war was to be of longer duration, then it would become absolutely necessary for engineering students to continue in school to complete their courses in order that an adequate supply of such men should be available during the war and for the reconstruction period which must of necessity follow.

The matter became so pressing that it was taken up by the Council of National Defense and a committee on engineering education was appointed by Dr. Hollis Godfrey, a member of the advisory commission of the Council of National Defense under whose general direction came all matters pertaining to education. The members of this committee were Charles S. Howe, president, Case School of Applied Science; Milo S. Ketchum, dean of the college of engineering, University of Colorado; C. R. Mann, Carnegie Foundation for the Advancement of Teaching; S. P. Capen, specialist in higher education, United States Bureau of Education; and F. L. Bishop, dean, school of engineering, University of Pittsburgh.

This committee, cooperating with the national engineering societies, the special war committee of the Society for the Promotion of Engineering Education and other organizations, presented the matter to the Secretary of War, who modified the Selective Service

Regulations. On December 19, 1917, the following regulation became effective:

Under such regulations as the Chief of Engineers may prescribe, a proportion of the students, as named by the school faculty, pursuing an engineering course in one of the approved technical engineering schools listed in the War Department may enlist in the enlisted reserve corps of the Engineer Department, and thereafter, upon presentation by the registrant to his local board of a certificate of enlistment, such certificate shall be filed with the questionnaire and the registrant shall be placed in Class V, on the ground that he is in the military service of the United States.

This regulation permitted students to enlist in the Engineers' Enlisted Reserve Corps and to remain in school until they completed their courses. It remained in force until superseded by the establishment of section A, Student Army Training Corps, and tended very materially to stabilize the student body in engineering schools, thus providing properly trained men not only for the War Department, but also for the industries.

The war also had a decided effect upon the curricula of engineering schools. While educational institutions, as a rule, are very conservative and slow in making changes in material and methods of instruction, the engineering schools responded quickly to the many new factors which were developed by the war, and important changes in the curriculum were put in force. Most of these changes had to do with methods of instruction of specific subjects, such as mathematics, thermodynamics, etc. There were, however, two general changes which might well be mentioned at this time. These were the applications of economic principles to the industries and some form of cooperative system by which the student secures actual engineering experience before graduation.

The most universal of these is the greater attention which is given to the application of economic principles to industries, engineering research, and the discussion of the problems of sociology sometimes placed under the broad title of human engineering. Formerly the engineer was supposed to deal only with the material and forces of nature, but recently an entirely new factor has entered—i. e., the human factor—and, in many cases, this is the all-controlling element with which the engineer must deal. Hence it becomes increasingly important to teach the prospective engineer as much as possible concerning the fundamental problems of psychology, sociology, etc.

It has also been demonstrated that the engineering student must during his course secure the fundamental knowledge of the engineering profession through actual practice in engineering work in the industries if he is to grasp properly the instructional work as given in the school. This has led to the adoption of the so-called cooperative system by which the student spends a portion of his time in the industries under the supervision of the faculty of the school in

which he is enrolled. This differs very decidedly from the old process in which the student worked summers at any kind of a job which he might select in any place without supervision. This cooperative work was discussed by Dr. Mann in the annual report of the Commissioner of Education for 1916.

As a result of the war courses, some teachers discovered for the first time that students will study and work if they are interested. The tendency for the engineering student to become so absorbed in his work as to neglect the college social and athletic activities has been of long standing, and during the past few years has been much discussed with beneficial results. When this tendency is properly controlled and directed it provides the incentive by which a young man may be trained mentally without detriment to his social development while in college. Scholarship is not incompatible with breadth of view or a desire to take a normal part in college activities. In fact, the latter ought to be so regulated that sound scholarship would be essential to participation in them. Those who had the opportunity of becoming acquainted with the kind of men who were required to fill the responsible positions in the world war were able to appreciate the fact that sound scholarship was an essential prerequisite for their participation in the war work.

The discussion of the changes in curriculum brought about by the war tended to emphasize the different criticisms which have been expressed in regard to engineering education and engineering schools for a considerable period of time. It is felt by many that these schools were producing well-trained men for certain highly technical phases of engineering, but were failing to produce an all-round engineer required for the proper development of the resources of the country. This discussion lead even as far back as 1907 to the appointment of a joint committee on engineering education. The report of this committee, which has become available during the past year, is the result of several years of investigation of engineering schools by Dr. C. R. Mann, of the Carnegie Foundation for the Advancement of Teaching. The report undoubtedly marks an epoch in engineering education because it embodies not only the investigation of a single able investigator, but the result of Dr. Mann's investigation has been discussed repeatedly as the work progressed before engineering societies, especially the Society for the Promotion of Engineering Education. Thus the report represents to a considerable extent a composite idea of the present standing of engineering education together with an outline of the probable future developments.

While the report does not advocate any specific change in the curriculum, it does in a broad way indicate the most probable form of development which engineering schools must take if they are to

meet the requirements of the industries and produce technically trained men who will compete with those from other countries. The report emphasizes the fact that we can find a proper type of training for men for the industries only through long continued experimentation in different types of schools. It calls attention specifically to the experiment in engineering education which has to do with the introduction of cooperative work and the elimination of the practice shop from schools. That greater emphasis must be laid on the correlation of industry with the schools is one of the fundamental conclusions of the report. Given the results of this long investigation and its discussion, the question immediately arises as to what type of experiment in education will be most fruitful in the development of the proper type of men for the industries. A survey of the situation by any one familiar with industrial needs seems to point clearly to the necessity in this country of developing two different types of men for use in the industries.

First, a man who may be called a technician, who is highly trained in science and mathematics, who possesses the instinct of the research man and who can devote his entire time to highly technical research problems, either in the research laboratories which are now rapidly being developed in the large industries, or by applying the results of his research to engineering science. For the training of this type of men, there is needed the best of scientific equipment, the members of the faculty must be those who are intimately interested in research problems, and the student himself must have what is sometimes called a mathematical mind. It is doubtful if this type of a man can be developed in a four-year course under existing conditions. In fact, it is probable that such a man can be developed only in a school which has a thorough graduate department devoting its energies primarily to research but giving instruction in the fundamentals of science and mathematics.

The second type which seems to be demanded by the industries is the man who has a broad general knowledge of engineering subjects and can apply that knowledge in an effective way in present engineering problems. He must have ability to command men, a knowledge of the applications of economic principles to industries, and a broad training in the so-called humanities, since he is the man in contact with men of other types in other fields of human activities. He should not be a research man, his training in mathematics need not be of necessity so extensive as that of the research technician, but his understanding of engineering problems should be extensive. Such a man can not be trained in the ordinary schools because of the artificial conditions which of necessity exist in academic institutions. He must become familiar with the industries while yet a student in order that he may understand thoroughly the applications of his

theoretical courses in school and their application to industries and also that he may become familiar in the formative period of life with the problems of labor and the human factor in engineering. It is in the development of this type of man, who is to become the manager and operating head of our large manufacturing industries, who needs more than any other the advantages to be derived from the cooperative system.

It is unfortunate that in this country we have no institutions with sufficient funds to develop a complete school of applied science, (1) having as its foundation a modified standard four-year course of instruction, (2) accepting young men for the course upon graduation from the high schools, (3) coordinating with this a proper cooperative system, and (4) having a graduate school devoted to instruction of graduates from a four-year course not only in the applications of science, but also of economic principles to industries. This graduate school should be in close coordination with the research department, corresponding in many ways to the Mellon Institute of Industrial Research at the University of Pittsburgh, where problems in the application of science to industries are studied at first hand under ideal conditions, and later the results of these investigations are applied directly to the solution of problems of industry. The graduate student would thus have the opportunity of taking his science and mathematics in an atmosphere that would be conducive to the development of the best type of man for research.

The Civil War was the crystallizing process which brought forth the type of engineering schools which are now common in this country. The result of the world war, in the same manner, will be the crystallization of the ideas now prevalent in regard to technical and scientific training. We shall have in the near future an engineering school of a type quite distinct from that in existence at the present time.

It is only necessary to mention it to bring to mind the failure of this country to provide for a school of engineering which has a faculty, buildings, equipment, and resources comparable with similar institutions in Europe.

In this country we have schools of engineering which offer excellent courses for undergraduates. We have one or two schools like Columbia University and the Massachusetts Institute of Technology which offer graduate courses to some extent. We have certain other schools like the University of Illinois, the Ohio State University, etc., that conduct research and engineering experiment stations supported by the State. There is, however, no single school which combines in an effective way all three factors which go to make a complete engineering school, namely, undergraduate courses, graduate courses, and research both pure and applied. I propose to outline briefly

some of the factors which must be taken into consideration in establishing such a school.

The engineer must be a man of culture and broad training such as can best be secured in the atmosphere of a large university. Also it is only at a university that there are available libraries and laboratories especially of science and economics, which are essential to the student of engineering and especially to graduate and research men. The university which has such a school as a part of it must be located at the center of a great industrial district where all types of engineering are available for study at first hand by the students.

In its undergraduate department the functions of such a school would be to train young men to enter engineering industries in which the present graduates from our best engineering schools now enter.

In its graduate department the function would be to train men to enter the research division of engineering industries and to supply the ever increasing demands made by the National and State Governments for trained investigators.

In its research department the function would be two-fold: First, to develop through pure research the fundamental principles upon which all engineering is based and to obtain standard data pertaining to the various materials employed in engineering work; second, the investigations of specific problems, solutions of which are demanded by individuals, firms, or corporation.

An estimate of the faculty, buildings, equipment, and resources which would be required for such an institution shows that an endowment of \$20,000,000 would be needed. Such a school should operate in close connection with the municipal, State, and National Governments in addition to its close cooperation with the industries of the country.

Since it seems at the present time impossible to secure adequate funds for such an institution it is highly desirable that different institutions in the country should devote themselves to the solution of specific problems and thus each one become an experimental laboratory for the benefit of engineering education.

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DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 20

THE RURAL TEACHER OF NEBRASKA

By A COMMITTEE
FROM THE GRADUATE SCHOOL OF EDUCATION
UNIVERSITY OF NEBRASKA



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1919

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, November 2, 1918.

SIR: I am submitting herewith for publication as a bulletin of the Bureau of Education the report of a survey of the status of the rural teachers of Nebraska, made under the direction of the graduate school of education in the University of Nebraska. The survey was undertaken to ascertain the exact status of the rural teachers of the State in regard to their academic and professional preparation; their teaching experience and length of service; their sex, age, and nationality; and such contributory factors in teaching efficiency as salary, living conditions, and the like. The survey is, in fact, a study of the preparation and efficiency of rural-school teachers, which may be considered typical of similar studies which might be made in other States.

The work was done with the cooperation of the graduate school of education in the University of Nebraska by a group of graduate students, working under the direction of Dr. G. W. A. Luckey, dean of this school. Much reliable material was procured on the education, experience, and general character of the teaching force of the State, together with first-hand knowledge of the conditions that contribute much to the home and school environment of the teachers. The collection and classification of the data are based upon scientific methods and should be of real value to the teaching profession of the country.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

The SECRETARY OF THE INTERIOR.

THE RURAL TEACHER OF NEBRASKA.

INTRODUCTION.

Purpose of the study.—The main object of making this study was to procure reliable information on the education, experience, and general character of the rural teaching force of Nebraska, together with first-hand knowledge of some of the conditions contributing to the home and school environment of these teachers. This knowledge was obtained by means of a questionnaire. It in no way represents theory or generalization, but is an array of facts on the rural teaching force of the State as given by the teachers themselves.

Practically no attempt has been made to compare conditions in Nebraska with those in other States or to offer suggestions for improvement. With both time and space limited, it has seemed best to give the facts as they were found and to omit comparisons and suggestions for reconstruction.

Method of procedure.—The survey is based on the six congressional districts of the State, and includes a study of all except the west half of the sixth congressional district. It represents 71 of the 93 counties of the State. The first, second, third, fourth, and east half of the fifth congressional districts belong to the loess region of Nebraska and represent the thickly settled, rich agricultural portion of the State.¹

Due to the lack of sufficient rainfall for successful farming, the west half of the fifth congressional district is sparsely settled. Topographically the portion of the sixth district surveyed comprises three distinct regions. Its northern portion is a part of the Great Plains region, its central part belongs to Sand Hill Nebraska, and the loess region extends into the southern part. The 22 counties of the sixth district which were not surveyed belong to the Sand Hills, High Plains, and Bad Lands regions.² With the exception of the North Platte Valley, where irrigation is practiced, these counties represent the most sparsely settled portion of the State. The accompanying map shows the congressional districts and the number of teachers responding from each district.

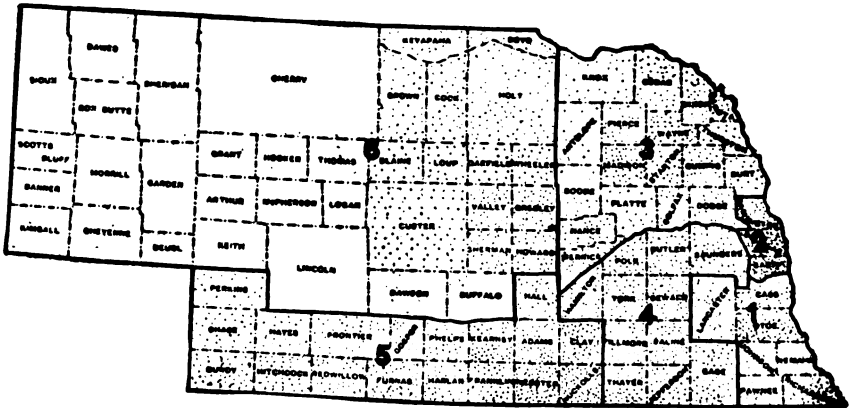
The material was collected during the school year of 1914-15, and the results of the study represent the teaching status for that year. The tabulations and discussions of the portions of the State assigned

¹ Condra. Geography of Nebraska. Pages 63-64.

² Condra. Geography of Nebraska. Plate II.

the various members of the committee were completed in 1916. The initial step of each member of the committee was a letter to the county superintendents in the various congressional districts, explaining the purpose of the study, inclosing one of the questionnaires, and requesting a list of the names and addresses of the rural teachers of the county. With but few exceptions the county superintendents were prompt in response with the roll of teachers. A personal letter, a copy of the questionnaire, and a return stamped envelope were then sent to every rural teacher, whose name and address had been furnished by the county superintendents. A few county superintendents mailed circular letters to the teachers of their counties urging their cooperation with the graduate school of education in this field of research. A still greater number lent their interest and encourage-

NEBRASKA



Map showing congressional districts. The dots represent teachers replying to questionnaires.

ment in some other way, such as by giving the investigation publicity at local teachers' gatherings. In some cases cooperation was sought of a few city superintendents, whose graduates from normal training courses were teaching in rural districts adjacent to the city districts.

Aside from the introduction, the historical sketch, and the recapitulation, the chapter heads correspond to the main divisions of the questionnaire. The tables and graphs accompany the discussions. The tables are numbered, and references to them are indicated in the body of the composition. The graphs are self-explanatory. Considerable variation will be noted between the total number of teachers replying to the questionnaires and those responding to each separate item. The context indicates these differences. Percentages are made on the number of teachers replying to the questions concerned rather than on the entire number of teachers reporting. The median was used as a measure more often than the average, since in so many

instances there was such a wide variation in the series of measurements.

Personnel of the survey staff.—This study was made by a committee from the graduate school, department of education, of the University of Nebraska. The personnel of the committee selected by Dr. G. W. A. Luckey, dean of the graduate school of education, included the following: Edith A. Lathrop, rural school inspector, chairman; Supts. A. Crago, of Central City; W. M. Simons, of Friend; E. M. Colbert, of Crawford; F. E. Weyer, of Atkinson; and R. T. Fosnot, teacher of mathematics, Hastings High School.

Mr. Simons withdrew late in 1915 and his place was filled by M. C. Lefler, who at that time was principal of the model high school at the State Normal School, Peru, Nebr. The portion of the study undertaken by Mr. Colbert was never completed.

The collection of material and tabulation of results were divided as follows: First and second congressional districts, Edith A. Lathrop; third congressional district, A. Crago; fourth congressional district, M. C. Lefler; fifth congressional district, R. T. Fosnot; the east half of the sixth congressional district, F. E. Weyer.

The final assembly of the studies of the various congressional districts into a connected whole represents the product of four of the five members of the committee. The chapter on Age, Sex, and Nationality is the composition of Mr. Weyer; that of Education, Mr. Crago; and Experience and the Movements of Nebraska's Educational Growth, Mr. Lefler. The remaining chapters, tables, graphs, and editing of the bulletin are the contribution of Miss Lathrop. She was chairman of the committee and was appointed assistant in rural education in the Bureau of Education in August, 1916. Since her appointment she has continued this work as a specialist of the bureau, during which time she has had the continued cooperation of Dr. Luckey and the committee.

CHAPTER I.

MOVEMENTS IN NEBRASKA'S EDUCATIONAL DEVELOPMENT.¹

HISTORICAL BEGINNINGS.

More than three centuries ago civilization first took root in this country, and yet it has been scarcely more than 50 years since much of the great Middle West lay without permanent settlement. Adventurers and explorers penetrated now and then into the interior, but the scattering trading points and mission stations were usually limited to the well-beaten paths that followed the natural trails or near the waterways of the country.

Pioneer Nebraska embraced a large area of this territory, extending at one time from the north line of what is now the State of Kansas to Canada on the north and "all the way * * * from the top of the Rocky Mountains on the west to Minnesota and Iowa" on the east.

Bellevue, the oldest town in Nebraska, was only a "little village of fur traders and missionaries" when thousands of emigrants traveled the great California-Oregon trails across the territory in their rush for gold along the Pacific. Situated on the Great Muddy, Bellevue has much historical significance, since here the early pioneers made their first permanent settlement, and it was "expected that Bellevue would be the capital of the State."

As the Territory opened, it was only natural that Iowa should furnish a large quota of the first settlers. Lands could be had for the mere coming into them, and the Iowans had little distance to travel in order to make such occupation. Many of these "picked out the land that suited them, built a log cabin to hold it," and then returned to their former homes where they continued to earn their livelihood.

But Iowa was not alone in contributing her best stock to the newer country. Missouri, Illinois, Michigan, Ohio, New York, Massachusetts, and Indiana, all sent men and women of courage whose coming meant the—

surrender of good homes and the endearments of kindred and friends in other communities. The privations of frontier life were voluntarily sought * * * by men and women who had the courage and spirit, * * * the best types of mankind physically and mentally. The dependent, the habitually gregarious, never strike out from parents, kindred, and comfortable circumstances of settled social life to challenge the hardship of the wilderness. Only civilization and those breeds of men capable of developing strong individuality and self-reliance can establish and maintain settlements remote from population centers.

¹ References consulted and quoted from: Morton, *History of Nebraska*; Sheldon, *History and Stories of Nebraska*; Reports of State Superintendents; Statutes of Nebraska.

EARLY SCHOOLS.

Even before the coming of the first settlers there is indication that schools had been thought necessary, and that some such opportunity had been given to the children that were said to be at old Fort Atkinson prior to its abandonment as a United States fort in 1827. In the missionary undertakings at Bellevue there is little doubt that education received special attention, and that these bearers of the Gospel message brought the school and its privileges, primitive as they were, to the Indians and half-breeds whom they sought to evangelize. The Mormons, too, as they journeyed from Illinois to their Utah home, spent the winter en route, at or near the present sites of Florence and Bellevue, during which time schools were ordered and instruction given to their children.

TERRITORIAL ORGANIZATION AND SCHOOL INTERESTS.

When the new Territory came to set up its own governmental machinery it found it expedient to incorporate into its own body of governing laws a large part of that which had been successfully tried in States already established. Settlers from Iowa were in substantial majority in the first Territorial Assembly of Nebraska, and as a result many of her provisions were adopted without change. As the later growth of the Commonwealth has brought new conditions in the life of its people, slowly the laws have been amended and modified to partially meet their needs, and what is true of progress in the general affairs of the State is equally true in matters of educational interest. The institution of the school and its principles has always been stoutly maintained in Nebraska. The first settlers believed in intelligence as an essential in good government and leadership, and were quick to provide for the common-school system, whereby free educational advantages might be secured.

To Brownville, Nemaha County, belongs the distinction of having the first public school in the Territory. The first school at what is now the city of Omaha is chronicled in the Records of the State Historical Society as being held in the basement of a brick church in the school year 1854-55.

At the initial session of the General Assembly of the Territory of Nebraska, which met at Omaha, January 16, 1855, definite law was enacted for the establishment of the "common school system." State supervision was here provided by giving to the State librarian an additional salary of \$200 per annum. The original compensation of the librarian was \$100 annually. The first schools were housed in the cabin homes, and oftentimes taught by the mothers since it was difficult to secure qualified teachers.

The first buildings set aside for school purposes were made of logs, while the rude benches and other furniture were hewn from the

native trees. As the population pushed into the prairie interior, where timber was not available, sod became the chief material used in construction. According to the last report of the State superintendent, issued in 1916, 104 sod schoolhouses still dot the plains of western Nebraska.

In these early days books were few and terms usually short, the winter months affording the customary season. Teachers could not afford to spend their meager wages, and were accordingly received into the homes of the different families where they "boarded round."

THE DISTRICT BOARD IN EARLY DAYS.

To the district board was given the power to "employ all teachers necessary for the schools of the district, and to pay them by draft on the treasurer," although they were not permitted to overdraw the teachers' funds, and if the amount of this fund were insufficient, the balance was to "be paid by the persons sending pupils." The funds from which the "teachers were paid were no part of the county or district taxes, but were raised by voluntary subscriptions among the school patrons."

The district board was comprised of three members, viz: President, secretary, and treasurer, "elected in each organized district at the regular district meeting." These officers were often "hunters and trappers, having little knowledge of books." However, before employing any teacher the board was empowered to "examine all applicants in spelling, reading, arithmetic, geography, history of the United States and English grammar, and if the applicant is found qualified * * * may employ him." The examinations were oral and not infrequently provoked heated argument between the candidate and the board as to the "right answer to a (given) question."

"At the first election of county officers" a county superintendent was provided, but the compensation did not attract many to the office. Two dollars per day "for the time actually spent in the performance of his duty," and payment at the rate of \$2.50 for each quarter section of school land which he could sell were specific provisions of the statute for his remuneration. The latter provision had the immediate tendency to direct the chief activities of the county superintendent from professional and supervisory functions to those of a legalized land agent. Thus local jurisdiction and control were quite supreme, and schools were operated very largely to suit the wishes peculiar to each neighborhood.

THE TOWNSHIP UNIT ADOPTED.

In 1858 the assembly deviated from the district plan by modeling the school organization after that of the Iowa township unit. The change provided that "every township in any organized county in

the Territory shall compose but one school district for all purposes connected with the general interests of education in the township * * * and shall be subject to the control and management of the board of education," but "territory within the limits of any city or incorporated village" was excluded from the jurisdiction of the township board, and placed under a governing board of its own.

The "several (existing) school districts" continued to be regarded as "subdistricts" under the direct control of the school directors, who had authority over local affairs, the employment and dismissal of teachers, the supervision and inspection of schools, the taking of the census, and the provision of sites and buildings. They could not, however, exceed the amount "distributable to (each) subdistrict in proportion to the enumeration of scholars resident therein, without the consent of a majority of the township board of education."

The township board was composed of a director from each subdistrict, and it was specifically provided that this member should be the one "who had been appointed clerk in his subdistrict." It was not the purpose that the township board should take over the duties peculiarly local, but rather that it should be "entrusted with the title, care, and custody of schoolhouses, sites, libraries, apparatus, or other property." They had the power to change or alter subdistricts at any regular session, two of which must be held each year according to the law in the months of April and October. No subdistrict could contain within its limits, except in cases where the township board might reduce the number, "less than 60 scholars by enumeration."

SCHOOL CHANGES ON ADMISSION TO STATEHOOD.

The township plan continued until the admission of the Territory as a State in 1867, when the district policy, modeled after the Ohio law, was reinstated. This has continued as the unit of organization up to the present time, although several attempts have been made to change to other units. While there were well-recognized objections to the district plan at the time of its adoption, yet the sparsely settled condition of the State made the general features of the plan well suited to early conditions. In addition it was argued that the "number of school officers would act as a stimulus on the people" and thus interest many who would otherwise have little concern for things educational.

The law created a board of three members for each district, the personnel being denominated "moderator, director, and treasurer," the powers and duties of each being definitely prescribed.

This same session passed an act "to locate, establish, and endow a State normal school at Peru," being the first State educational institution authorized within the jurisdiction of the new Common-

wealth. About 70 students were enrolled during the first term which opened October, 1867. There were three departments: Normal, seminary, and primary. Tuition and room rent were the only sources of income in the first school. There were but two teachers and an assistant.

Changes in school legislation have for the most part been conservative, and oftentimes inadequate to meet the rapidly changing needs of the State. In 1915 a drastic revision of the statutes as affecting education was proposed in the form of a "school code," but the bill was defeated, except as a number of its less radical provisions were attached in the form of amendments to already pending measures.

SCHOOL FUNDS.

Nebraska, like Minnesota, Texas, and other newer States, is especially favored in having a large State school fund, which, in addition to local taxation and special State appropriations, give ample means for promoting the cause of education. It is probable that no one foresaw clearly the latent possibilities for school welfare which the policy of the United States Government, initiated in the Ordinance of 1787, offered in its donation of thousands of acres of land "known as sections number 16 and 36 in every township." Some, however, had true vision that the future offered much for educational enterprise and progress.

Those who had administration of affairs and the handling of these funds were duly cautioned lest generations yet unborn should be deprived of privileges and opportunities within the reach of all, if resources were only properly conserved. A section of the superintendent of public instruction's report to the Fourth Territorial Assembly, 1857, is in point. It reads:

If the school lands are held intact; not sold too early or exchanged for others of less value * * * this Territory will possess a school fund * * * which will give to every son and daughter * * * a good practical common-school education. As the school lands are the basis of this prospective fund * * * every citizen should be deeply interested in their preservation, and legislators will not hesitate to throw around them that protection which shall preserve them for all time to come.

In this spirit the Federal Government made its grant of nearly three millions of acres for school purposes upon the admission of the Territory to statehood. For the most part the trust has been faithfully kept, but a defalcation, the one great blot on the history of Nebraska school funds, caused a loss amounting to about one-half million dollars, none of which has ever been returned to the State. Over a million acres of this land have been converted into cash through sale, the first appraised value being "not less than \$1.25 per acre." The total amount derived from all sales now exceeds \$8,000,000, the interest of which is used for maintaining the public schools. This,

together with rentals accruing from the 1,800,000 acres remaining unsold, makes no mean fund. Incomes from rentals have constantly increased. The following figures indicate the growth:

1870.....	\$6, 727. 87
1880.....	127, 341. 72
1890.....	225, 554. 31
1900.....	210, 274. 72
1910.....	321, 958. 90

The amount derived from the sales of lands was gradually increased from \$64,964.87 in 1867-68 to \$8,482,142.76 in 1912. By legislative enactment in 1897 all school lands were withdrawn from further sale.

The total income from lands, bonds, warrants, interest on loans, peddler, game, and fish licenses and taxes collected for the biennium 1910-1912 amounted to \$1,298,054.24.

SCHOOL TAXES.

The first taxes for school purposes were small, the law giving the county superintendent authority to levy the county school tax amounting to not less than 3 nor more than 5 mills on the assessed valuation of all property, real and personal. These funds were collected as other taxes and were "apportioned together with fines, sales of watercraft, lost goods, and estrays to the several districts on the basis of the school census, providing each district had raised locally a tax of not less than 3 mills."

The levy has steadily increased until now an amount not exceeding "in any one year three and one-half dollars on the one hundred dollars valuation as assessed and equalized" may be made available for school purposes. Prior to the annual meeting in each school district the law provides that the trustees shall prepare an estimate of the amount sufficient to maintain school for the coming year. This amount, which is limited by certain provisions of the laws, must be voted on by the electors at the annual meeting, certified by the district board to the county clerk, and the levy made by the county board on the assessed valuation of the district property.

MINIMUM TERMS OF SCHOOL.

In districts having "less than 20 pupils of school age" four months of school is imperative; in districts having "between 20 and 75 pupils, inclusive," eight months is the minimum; and in "districts having more than 75 pupils" nine months is required by law.

TRAINING OF TEACHERS.

From the earliest days attention has been given to securing duly qualified and prepared teachers. The district board, the county superintendent, and finally the State, through its system of uniform

examinations, have, in turn, been entrusted with the power to examine candidates and indicate their fitness for teaching. But the training of teachers in the sense of a special teacher for a special task, as applied to rural schools, may be truly regarded as an innovation too little tested and tried to fully predict what the ultimate plan will be in this respect. Doubtless many of the means now employed will prove but evolutionary steps toward more comprehensive and effective method of training.

JUNIOR NORMAL SCHOOLS.

In 1903 the Nebraska Legislature, for the encouragement of rural teacher training, authorized the establishment of "not less than three nor more than five junior normal schools."

Three of these schools were placed by law "in the school districts of Alliance, McCook, and Valentine," while Holdredge and North Platte were designated by the State superintendent of public instruction as the other points for establishment.

No entrance charges were made, and anyone of "good moral character and good physical health" could enroll, if "14 years of age," and possessing a "fair degree of knowledge of the common school branches * * * obtained in the country schools, or the lower eight grades of well-organized city schools."

Terms were originally "not less than ten weeks," held during the vacation period "between the first day of June and the first day of September of each year." In 1907 the law was amended changing the term "from not less than six nor more than eight weeks," and providing that the number of schools should not be "less than five nor more than eight." In accordance with this new law, schools not already located by the terms of the statute were placed at "Alma, Broken Bow, Geneva, North Platte, and O'Neill."

The course of study was designed to parallel the work offered in the elementary curriculum of the State normal schools. Satisfactory marks earned upon attendance at any junior normal could be offered in lieu of requirements of similar rank in the senior normals. The following subjects are typical: Arithmetic, United States history, theory and art, music, grammar, physiology, geography, reading, and methods.

In 1913 the Geneva Junior Normal was closed, but the seven other schools continued on the work which they had been doing until they were deprived of the State allowance. Upon recommendation of the State superintendent the 1915 legislature did not make appropriations for further maintenance, and all were discontinued.

NORMAL TRAINING IN HIGH SCHOOLS.

While the organization of additional State normal schools at Chadron and Wayne probably lessened somewhat the need for the continuance of junior normal schools, the rapid rise of normal training classes in duly approved high schools of the State was the real disintegrating force. Normal training in the secondary schools was not a new idea when it was recommended for adoption in Nebraska. The academies of New York State had very early proved the principal agency in providing teachers for the common schools, where as early as 1834 the "first direct act of * * * any legislative body in the New World, providing for the professional training of teachers" was enacted.

Nebraska's first law relative to normal training in authorized high schools was passed in 1905, as a part of a law initiating a new system of certification of all classes of teachers. The following is the provision for normal training:

On and after September 1, 1907, no person shall be granted a first-grade county certificate who has not had at least 12 weeks' normal training in a college, university, or normal school of approved standing in this or in another State, or in a State junior normal school of Nebraska, or in a high school of Nebraska approved by the State superintendent of public instruction as being equipped to give such instruction.

Section 8 of the same law is identical with that quoted above, except that it deals with the granting of "second-grade" certificates, and specifies "at least 8 weeks' normal training" instead of 12.

At the 1907 session of the legislature, normal training high schools were duly provided "for the purpose of giving teachers an opportunity to meet the requirements in normal training" as made mandatory in the certification law of 1905, already cited. This act gave the "superintendent of public instruction" the power to "designate the high schools in which such instruction shall be given" and to "prescribe the conditions of admission to the normal training classes, the course of instruction, and the rules * * * and regulations." State aid is given in the "sum of \$700 for the biennium * * * to each school in which a class of not less than 10 is organized and instructed in accordance with the provisions of this act." The report of the State superintendent for the year ending July, 1917, shows 142 normal training high schools, with an enrollment of 4,560 pupils, drawing money from the State.

STATE NORMAL SCHOOLS.

When normal schools were first introduced into this country they were intended solely to prepare teachers for the common schools. Very early, however, in the history of Nebraska's normals practically all of the graduates began to find places in the elementary depart-

ments of village and city schools, where the demand for normal trained teachers has constantly exceeded the supply. The result has been that a very small number of persons have returned to the rural communities to teach; and the establishment of new normal schools has only added to the stream of teachers entering the city and town positions.

In recent years the rural-life movement throughout the Nation has brought a feeling among the country folk that the State normals should send a reasonable proportion of their finished product back into the rural schools with a training that fits them especially for solving the problems of agricultural and farm life.

In 1915 the first distinct legislation was effected making it obligatory for all Nebraska State normals to furnish definite rural-teacher preparation. The law is entitled "An act to provide a course in the State normal schools of Nebraska for the training and the proper certification of rural teachers." It specifies that "there shall be established in the State normal schools of Nebraska a course of study for rural teachers" that—

shall contain thorough instruction in the common-school subjects, rural sociology, management, and organization of rural schools, observation, consideration of how to organize a rural school and make a schoolhouse a social center, manual training, sanitary sciences, household economics, agriculture, and vocal music. The course shall cover two years, and mature students may enter directly from the tenth grade, and upon completion of said course may be granted county certificates under the rules to be prescribed by the State superintendent of public instruction.

All Nebraska normals have established courses in accordance with this law. At Chadron, Peru, Kearney, and Wayne special rural school departments have been created and placed in charge of experts along lines of rural life and education.

Nebraska's latest step toward rural-teacher training was taken by the last regular session of the legislature when a law was enacted which makes possible the certification of certain classes of teachers upon two-years' training above the completion of the eighth grade. This act is regarded by many prominent school people as a distinctly backward step in the maintenance of standards for a more efficient teaching body for the rural schools of the State. The specific bill is House roll 350, entitled "An act relating to courses in State normal schools of Nebraska for the training of teachers for rural schools." The provisions of the law as finally enacted are as follows:

There may be established in the State-normal schools of Nebraska two courses of study for the training of rural teachers—an elementary course and an advanced course. The elementary course shall be two years in length and shall include thorough instruction in the common-school subjects, rural sociology, the management and organization of rural schools, manual training, domestic science, and such other subjects as the board of education of normal schools may deem necessary to equip the student for

rural-school service. To enter the course the student shall be at least 16 years of age and have completed the eighth grade or its equivalent. On completion of the elementary course he shall receive a rural elementary certificate good for three years. This certificate may be renewed by such further advanced study as may be prescribed by the board of education of State normal schools.

The advanced course shall be two years in length. To enter this course the student must have completed the elementary rural-school course or its equivalent. This course shall contain such subjects as may be prescribed by the board of education of State normal schools. On completion of the advanced course the student shall receive a first-grade rural-school certificate, and after three years of experience shall be entitled to a professional rural State certificate good for life.

Teachers of experience and graduates of four-year high-school course may complete the advanced rural course and receive the certificate upon passing such work as may be prescribed by the board of education of State normal schools. The advanced certificate shall also be valid in village and town schools as contemplated under the school laws of Nebraska.

Each of the four normal schools of the State has established rural school courses in accordance with the provisions of law just recited.

CHAPTER II.

RESPONSE, SEX, AGE, AND NATIONALITY.

RESPONSE.

Of the 5,253 Nebraska rural teachers included in this study 3,278 responded to the questionnaire. Table 1 indicates the totals and percentages of teachers responding from each district. The best record was made in the second congressional district, where 82.7 per cent responded. Good records were made in the fifth and first congressional districts, where the responses were 77.3 and 71.7 per cent, respectively. Some counties made excellent records in the percentage of replies. Sarpy and Webster, 100 per cent; Kearney, 90.6 per cent; Saline, 90.2 per cent; Adams, 90.1 per cent; Otoe, 89 per cent; and Brown, 88 per cent. The response from the State as a whole was 62.4 per cent.

As the Nebraska study is based upon replies from 62.4 per cent of all the rural teachers in the Territory included in the survey, the data may be considered representative of the State as a whole. Some reader may urge that those who answered the questionnaire were, by virtue of that fact, a selected group and that the data do not represent the lower range of distribution. A study of the various counties where replies ranging from 100 per cent to 30 per cent were received do not indicate that such is the case. It may be reasonably assumed, then, that the data do not include any considerable constant errors.

TABLE 1.—*Response and sex.*

Congressional district.	Teachers employed.			Teachers responding.			Per cent responding.	Rank.
	Male.	Female.	Total.	Male.	Female.	Total.		
First.....	41	574	615	36	405	441	71.7	Second.
Second.....	9	130	139	4	111	115	82.7	First.
Third.....	100	1,177	1,277	55	496	550	43.6	Sixth.
Fourth.....			970	55	543	598	61.6	Fourth.
Fifth.....			1,201	117	811	928	77.3	Third.
Sixth (east half).....	109	942	1,051	72	574	646	61.4	Fifth.
Total.....			5,253	339	2,939	3,278		
Per cent.....			100			62.4		

SEX.

Of the 3,278 teachers reporting 339, or 10.3 per cent, were males. There was no important sex variation between the congressional

districts, though there was often a decided variation among the counties of each district. The following gives the maxima and minima variations of male teachers in each district:

Male teachers in each congressional district.

Congressional districts.	Counties.	Per cent.	Counties.	Per cent.
First.....	Pawnee.....	16.4	Cass.....	2.3
Second.....	Washington.....	9.0	Sarpy.....	3.0
Third.....	Knox.....	13.6	Burt.....	1.5
Fourth.....	Jefferson.....	22.2	Polk.....	.0
Fifth.....	Frontier.....	25.6	Kearney.....	3.4
Sixth.....	Rock.....	20.4	Blaine.....	.4

Or, considering the first five of the lower seven Missouri River counties, it was found that Burt County had 1.5 per cent male teachers; Washington, 9 per cent; Douglas, 6.3 per cent; Sarpy, 3 per cent; and Cass, 2.3 per cent. In some cases the variation, especially in the western section, may be explained by the fact that

COMPARATIVE NUMBER
OF MEN AND WOMEN TEACHERS

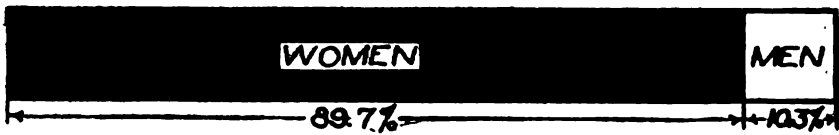


Fig. 1.

many young men have within recent years gone there to take a "Kinkaid homestead," and during the winter months these young men have found it possible to teach in a near-by school.

Concerning the permanency of these men as rural teachers, the report from the first and second congressional districts is representative of conditions in the State.

Of the 39 reporting on the subject of a life work (a question asked later in the questionnaire) only 15 men said that they expected to continue teaching and only 7 expected to continue their work in the rural schools. Of the 40 men teachers responding to the blanks, 27, or 67 per cent, were 21 years of age or younger. Since so large a per cent of these rural men teachers were little more than boys of high-school age, it is quite probable that those who answered in the affirmative, relative to their life work, would change their minds after a few years.¹

The following statistics show the history of the percentage of men teachers in Nebraska since 1870. Allowance must be made for these figures as they include both rural and city teachers. The increase

¹ Lathrop. Status of the Rural Teacher in the First and Second Congressional Districts of Nebraska. Page 18.

of male teachers since 1910 may be explained by the introduction of more vocational work in the high school which requires more men.

	Per cent male.	Per cent female.
1870.....	49	51
1880.....	39	61
1890.....	27	73
1900.....	21	79
1910.....	11	89
1914.....	12	88
1915.....	14	86

Since America's advent into the World War the number of men teachers has greatly decreased. When statistics on this point for Nebraska are made available for 1917 and 1918 the percentage of male teachers will probably be far below those cited in the above investigations.

One member of the committee made a comparison of the number of married and single teachers in his district.

Only 11 out of the entire group of 598 teachers reported that they were married, and of the 11, four were men. The majority of the women who were married indicated that they were teaching because it had been made necessary by force of circumstances, usually the death or sickness of the husband. The rural school made it possible for them to return to the "old home" and there receive the touch of sympathy and the share of thoughtful regard so much needed. One of the four men said he had a family of 12 children and that in addition to his salary of \$65 per month he operated a farm of about 40 acres.²

AGE.

A comparison of the age tables, found in the studies of the various congressional districts, indicated that the ages ranged from 16 to 60 years, and that in this range every age except 52 was represented. Table 2 shows that 3,143 of the 3,278 teachers responded to the question of age. The groupings show that 50 per cent of the teachers were between 16 and 20 years of age and 38 per cent were between 16 and 25 years. The median age was 21.01 years.

There was little variation in the age of the teachers over the State, the medians being as follows: First and second congressional districts, 20.48 years; third, 21.01 years; fourth, 20.95 years; fifth, 21.1 years; sixth, 20.97 years.

The fifth district had the widest range of ages, and every age from 16 to 60 was represented except 48, 52, 55, and 56. The following counties did not report any teachers over 25: Colfax, Pierce, and Butler.

Miss Lathrop made a study of the comparative ages for men and women teachers in the first and second districts.

Fifty-six per cent of the men were between 17 and 20 years; 31 per cent between 21 and 25 years; making a total of 87 per cent between 17 and 25 years. Forty-nine per

¹ Biennial Report of State Superintendent, 1914, and Nebraska Educational Directory, 1915-16.

² Lefler. Status of the Rural Teacher in the Fourth Congressional District of Nebraska. Page 67.

cent of the women were between 17 and 20; and 39 per cent between 21 and 25, making a total of 88 per cent between 17 and 25.

Mr. Lefler made a study of the age of teachers who were teaching their first year. The following statistics based on the fourth district indicate his findings:

One hundred and ninety of the 198 beginners reporting indicated their ages. The range of ages was from 17 to 25 years. Median age for beginners, 19.6 years. Per cent 17 years old at beginning, 6.8; per cent 18 years old at beginning, 22.1; per cent 19 years old at beginning, 30.5; per cent 20 years old at beginning, 16.3; all others, i. e., 21 or over, 24.3.

When it is remembered that the beginning class constitutes 36.1 per cent of the entire rural teaching force in the fourth district, it becomes at once apparent how really amateurish and inexperienced rural teachers are.¹

No movement for rural-life improvement and rural-school betterment can be logically pursued which does not keep ever in mind the facts concerning the ages of teachers employed. This qualification is inseparably associated with preparation and experience, answers in very large part the feasibility of the teacher's cottage as a means of solving the problems of the boarding place, gives a strong point to the apostle of consolidation, denies in large measure the probability that the teacher can become a real social leader in her community, explains in no small degree the reason for lonesomeness, homesickness, and impatience, partially accounts for absence from the districts over Saturdays and Sundays, shows how difficult will be the introduction and extension of agriculture and vocational courses, is an index to the salary dilemma—in short, it enters vitally into every consideration which seeks the rejuvenation and reconstruction of the rural school in the interests of the country folk. While it is not a complete and sufficient answer in itself, it is always a large and important factor and needs constantly to be remembered.¹

This part of the report should be studied in connection with that on education as well as that on salary. The teacher, first of all, must be well prepared for her special field of work. Because of the many problems arising the rural teacher must be especially well prepared, for even under the best supervisory systems, she is left largely to her own resources. For the teacher who makes the right kind of preparation for her rural work, the age limit will largely take care of itself, and will be over and not under the 20-year mark.

TABLE 2.—*Age of teachers.*

Number of district.	Teachers reporting on age.	Age.								
		16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60
First.....	427	222	159	30	7	9	.....	.....	.....	.....
Second.....	114	47	61	7	4	1	3	1	.....	.....
Third.....	516	257	203	37	10	4	3	2	.....	.....
Fourth.....	576	294	217	41	8	6	7	2	1	.....
Fifth.....	901	442	339	58	21	11	15	4	5	6
Sixth (east half).....	609	307	226	42	12	5	8	5	.....	4
Total.....	3,143	1,569	1,195	215	62	36	36	14	6	10
Per cent.....	100	50	38	7	2	1	1	1		

Median age, 21.01 years.

¹ Lefler. Status of the Rural Teacher in the Fourth Congressional District of Nebraska. Pages 186-189.

NATIONALITY.

Only 2,357 of the 3,278 teachers reporting replied to the question asked on nationality. The low percentage of replies on this item is explained by the fact that the word nationality was omitted on a large percentage of the blanks mailed. Table 3 shows that of the 2,357 teachers reporting, 1,119, or 47 per cent, stated that they were Americans. The following assertion of Miss Lathrop relative to the absence of a definite standard for the term "American," in the

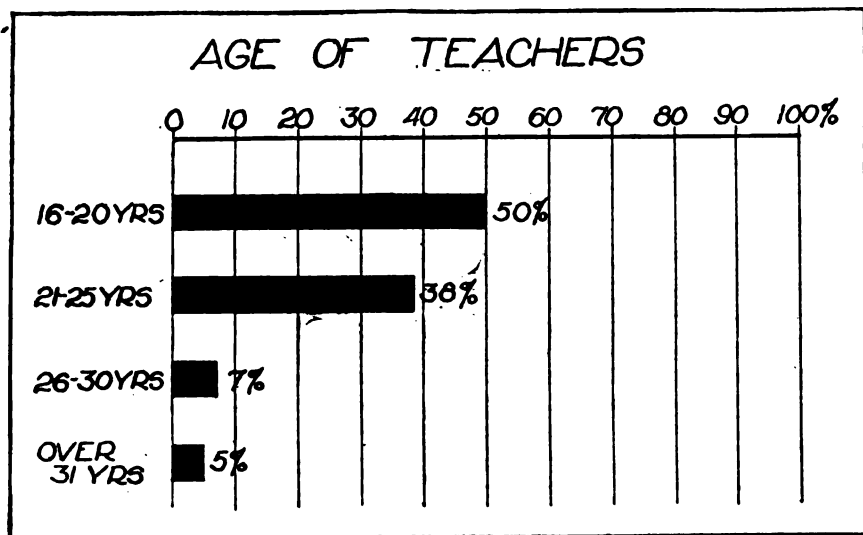


Fig. 2.

answers received from the first and second congressional districts, is probably characteristic of all of the replies received on nationality:

In answer to a later question in the survey, on where the elementary education was received, several teachers named countries in Europe. The conclusion was that these were foreign born, while the remainder were of foreign lineage. There was nothing to indicate whether the individual was one or more generations removed from this foreign lineage. The probability is that there was considerable overlapping in the answers, some answering "American" where the foreign blood was close and others calling up a remote ancestry.

The term "mixed" in the table includes those whose ancestry was represented by more than two nations and includes 13 per cent of all the teachers. The ranking for the first five nationalities in representation was (1) American, 47 per cent; (2) German, 13 per cent; (3) English, 7 per cent; (4) Swedish, 5 per cent; (5) Irish, 5 per cent.

Of the total white stock of foreign origin (in Nebraska), which includes persons born abroad and also natives having one or both parents born abroad, Germany contributed 37.5 per cent;¹ Austria,

¹ Thirteenth Census of the United States, 1910. Vol. 3, page 45, Table 5.

11.7 per cent; Sweden, 10.9 per cent; Ireland, 7 per cent; Denmark, 6 per cent; England, 5.7 per cent; Russia, 4.6 per cent; Canada, 4.5 per cent; Scotland, 1.6 per cent; Norway, 1.4 per cent; Switzerland, 1.2 per cent.

Of the total population of Nebraska, 53.9 per cent are native whites of native parentage; 30.4 per cent are native whites of foreign or mixed parentage; 14.8 per cent are foreign-born whites; and 0.6 per cent are Negroes.¹

In seven of the ninety counties foreign-born whites constitute as much as one-fifth of the population, the proportion being highest (23.6 per cent) in Colfax County. In 54 counties, however, more than one-fourth of the population are native whites of foreign or mixed parentage, the maximum (52.9 per cent) being that for Cuming County.¹

Composition of Colfax and Cuming Counties in 1910.

Lineage.	Colfax County.		Cuming County.	
	Number.	Per cent.	Number.	Per cent.
Total population.....	11,610	100	13,782	100
Native white of native parentage.....	3,253	28	3,415	24.8
Native white of foreign or mixed parentage.....	5,607	48.3	7,384	52.9
Foreign-born whites.....	2,738	23.6	3,056	22.2

Computations made from statistics in the Thirteenth Census show that in Colfax County 28 per cent of the population are native white of native parentage; 36 per cent are of Austro-Hungarian birth or lineage; 13 per cent of German; 2 per cent of Irish; 0.07 per cent Danish; and 0.04 per cent Swedish. In Cuming County there are 24.8 per cent native white of native parentage; 37 per cent of German birth or lineage; 6 per cent of Austro-Hungarian; 5 per cent Swedish; 2 per cent of Danish; 1 per cent of Irish.²

Of those teachers reporting in Colfax County, 51 per cent were Americans, 21 per cent German, 11 per cent Bohemian, and 3 per cent Irish. In Cuming County, 39 per cent were American, 29 per cent German, 5 per cent Danish, 5 per cent Irish, and 4 per cent Swedish.³

The figures on foreign-born white population in the Thirteenth Census of the United States for 1910 for the first and second congressional districts show that those of German birth outranked other nationalities in all the 10 counties of the two districts except Pawnee and Lancaster. About 8 per cent of the entire population of Lancaster County are Russian, either foreign born or natives of foreign or mixed parents of Russian extraction. This is due to the large Russian settlement in the city of Lincoln. The table (for the first and second districts) indicates an absence of teachers of Russian lineage. This can be explained by the fact that a very small percentage of the Russian population in Lincoln enter the high school. Thirty-seven per cent of the teach-

¹ Thirteenth Census of the United States, 1910. Vol. 3, page 43.

² Thirteenth Census of the United States, 1910. Vol. 3, page 52, Table 1.

³ Crago. Status of the Rural Teacher in the Third Congressional District of Nebraska. Page 58.

ers in Washington County were of Danish extraction. A comparison of figures in the Thirteenth Census of the United States (1910) indicates 14 per cent of the population were either born in Denmark or were of Danish extraction. The Thirteenth Census shows quite a large per cent of foreign-born population from Austria, Greece, and Turkey in the 10 counties. The absence of teachers from these lineages is noted in the table. This would indicate that, with the exception of Russia, children from parents of the north European countries rather than from south European are entering the teaching profession.¹

It is interesting to note that some nationalities seem to be grouped in counties or localities. For example, Phelps County has 25 Swedish teachers, or a total of 45.5 per cent of all the Swedes in the entire district, while five counties (Chase, Frontier, Hall, Nuckolls, and Red Willow) failed to report any.²

Of the 10,442 whites in Phelps County, according to the Thirteenth Census, there were: Native American whites, 3,986, or 38.1 per cent; foreign born or foreign parentage (excluding Swedes), 2,176, or 20.8 per cent; Swedes or Swedish parentage, 4,280, or 40.9 per cent.³ Fifty-two teachers in all reported for Phelps County, and of these 25, or 48 per cent, were Swedes; 14, or 27 per cent, were Americans; and the rest were distributed among the remaining nationalities.

These data are quite inadequate to warrant generalizations, but they are at least suggestive and point to an interesting research study to determine whether or not the foreign elements of our population go into the teaching profession in greater numbers than do the native-born Americans. It is highly probable that the tendency for certain European nationalities to turn to teaching in larger numbers than do Americans is the result of the removal in this country of rigid extension qualifications that make the position of teacher so desirable in Europe and give it true professional significance. Foreigners look upon the calling as one of honor and are quick to take advantage of the freedom that America offers to the teaching ranks.⁴

All nationalities that are represented in the State were represented among the teachers except the following: Greeks, Italians, Russians, Turks, Orientals, and Negroes.

It is interesting in connection with a study of nationality to compare with answers showing the reasons given for the difference between census and enrollment. It is found here that 27.6 per cent of the answers given refer to parochial schools.⁵

A very significant fact in this study is that over half of the rural teachers in Nebraska were of foreign extraction. In the present world crisis it is important to note that 13 per cent of the teachers were German and 3 per cent were Bohemian. But the problem is even of greater importance in that the present conflict is revealing to us that we have been lacking in national spirit. It is difficult to have it in a Commonwealth where there is an infusion of the language and blood of many nations unless there is a very strong effort made to

¹ Lathrop. Status of the Rural Teacher in the First Congressional District of Nebraska. Page 32.

² Fosnot. Status of the Rural Teacher in the Fifth Congressional District of Nebraska. Page 31.

³ Thirteenth Census of United States. Vol. 3. Page 62.

⁴ Leffer. Status of the Rural Teacher in the Fourth Congressional District of Nebraska. Pages 184-185.

⁵ Crago. Status of the Rural Teacher in the Third Congressional District of Nebraska. Page 126.

socialize the different elements and weld them into a unified whole. In this America has so far partially failed.

The American public school is the one institution that can socialize the many varied elements of our population. But unless the teacher, the center of the school life, is filled with a practical patriotism, the pupils will fail to catch the spirit of our national ideals and a love for our national traditions. It therefore becomes evident how important it is that the teacher be an American in sympathy, ideals, training, and loyalty.

TABLE 3.—*Nationality.*

Number of district.	Number responding.	American.	Mixed.	German.	English.	Swedish.	Irish.	Bohemian.	Danish.	Scottish.	Norwegian, etc. ¹
First.....	352	100	42	52	23	5	13	12	1	5	0
Second.....	113	50	16	19	23	8	7	12	12	2	1
Third.....	432	161	76	72	23	23	21	28	2	2	14
Fourth.....	149	55	15	22	8	15	10	17	2	2	8
Fifth.....	801	448	28	97	66	55	34	4	17	26	26
Sixth.....	510	215	125	37	38	19	36	16	10	3	11
Total.....	2,357	1,119	302	299	158	125	121	77	54	38	64
Per cent.....	100	47	13	13	7	5	5	3	2	2	3

¹ And so forth included French, Dutch, Welsh, Swiss, and Flemish.

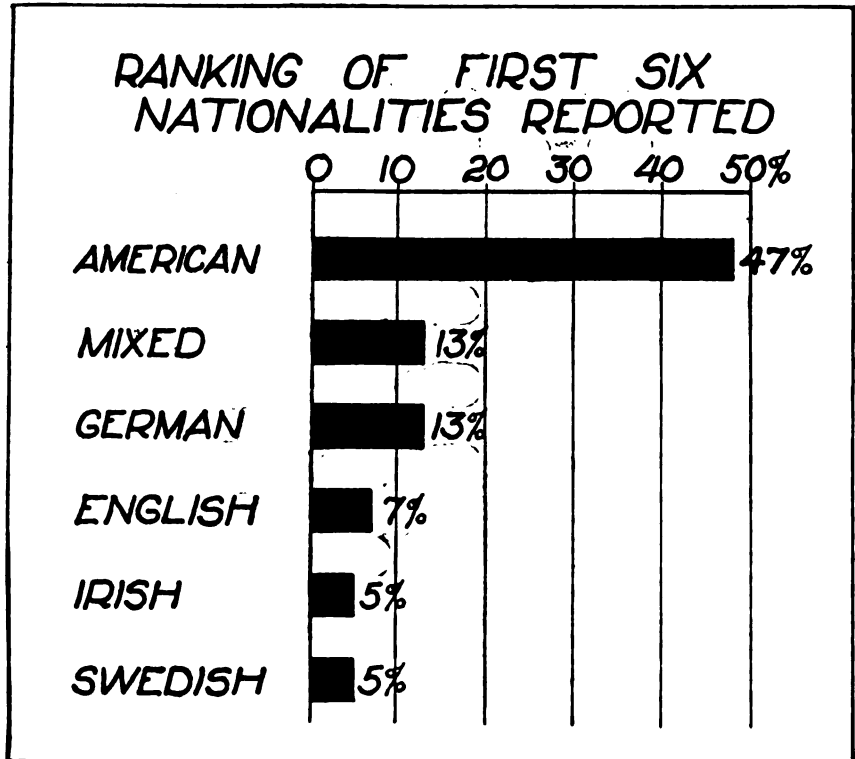


Fig. 3.

SUMMARY.

The response for the State was 62.4 per cent. The women comprised 89.7 per cent. The median age was 21.01 years. The number of responses on nationality was small. From the data given, 47 per cent reported that they were Americans. The highest four percentages of nationalities were as follows: German, 31 per cent; English, 7 per cent; Swedish, 5 per cent; Irish, 5 per cent; while 13 per cent reported several nationalities. These were classed under the term "Mixed."

CHAPTER III.

EDUCATION.

In the study of a school system, one of the first items for consideration is the preparation and experience of teachers. The discussion that follows indicates the educational preparation and, to a certain extent, the social preparation of the rural teachers of Nebraska.

ELEMENTARY EDUCATION.

In the accompanying table, showing elementary education, it is evident that 41 per cent of the 2,874 teachers reporting had less than 72 months of work in the elementary school. As the question called for "actual number of months spent below the high school," this number may include some who made satisfactory preparation in the elementary work, as eight years of eight months each would still place a person in this list. And many pupils, in small classes, doing almost individual work, would satisfactorily complete the work in less than 72 months. The 41 per cent also included many of the older teachers whose elementary work was very irregular. The studies made in the different districts of the State show reports as low as 17 months in elementary work. Thirty-four per cent reported that they had 72 months in elementary work; 25 per cent reported that they had 72 or more months in elementary work or had completed the eighth grade. The studies made in the districts covering the eastern part of the State, where four-year high schools are more accessible, indicated that 70 per cent had completed the elementary school preparation.

TABLE 4.—*Elementary education of teachers.*

Number of district.	Teachers reporting on education.	Had less than 72 months.	Had 72 months.	Had more than 72 months.	Completed eighth grade.
First.....	392	150	156	86	.....
Second.....	104	27	45	31	1
Third.....	508	191	130	109	76
Fourth.....	540	195	221	105	18
Fifth.....	792	358	270	165	.....
Sixth (east half).....	540	256	163	92	29
Total.....	2,874	1,175	985	590	124
Per cent.....	100	41	34	21	4

SECONDARY EDUCATION.

Two thousand eight hundred and forty teachers reported on secondary education. Of this number, 56 per cent spent 36 or more months in the work beyond the elementary school. This does not necessarily mean graduation from a high school or academy, but does represent four years of training beyond the elementary work. Here, too, the per cent is higher in the districts comprising the eastern half of the State.

TABLE 5.—*Secondary education of teachers.*

Number of district.	Teachers reporting.	Had no secondary education.	Had less than 9 months.	Had 9 months or less than 18.	Had 18 months or less than 27.	Had 27 months or less than 36.	Had 36 months.	Had more than 36 months.
First.....	390	5	4	13	54	67	221	16
Second.....	100	1	3	4	11	5	45	31
Third.....	433	25	.....	36	65	64	232	11
Fourth.....	553	11	1	16	87	94	321	23
Fifth.....	813	.....	19	65	120	119	461	29
Sixth (east half).....	561	00	9	78	106	85	208	15
Total.....	2,840	102	26	212	443	434	1,488	125
Per cent.....	100	4	1	8	16	15	52	4

EDUCATION BEYOND THE HIGH SCHOOL.

The following table shows the replies of the teachers with reference to education beyond the high school:

TABLE 6.—*Education beyond the high school.*

Number of district.	Teachers reporting.	No education beyond high school.	Norma. school.			Colleges and universities.			Business and correspondence schools.	
			One summer.	Not graduated.	Graduated.	One summer.	Not graduated.	Graduated.	Not completed.	Completed.
First.....	305	103	75	76	.....	15	32	.....	3	1
Second.....	107	42	19	33	.....	6	7	.....	.....	.....
Third.....	418	253	107	46	.....	1	11	.....	.....	.....
Fourth.....	486	153	154	65	3	37	52	2	20	.....
Fifth.....	313	164	70	10	1	33	30	2	3	.....
Sixth (east half).....	478	179	120	118	.....	.....	27	.....	34	.....
Total.....	2,107	894	545	348	4	92	159	4	60	1
Per cent.....	100	42	26	17	.....	4	7	.....	3	.....

The significant facts about the table are that 42 per cent of the teachers reported no education beyond the high school; and that one summer represented the maximum normal school education. If this is compared with the table showing age and also with the table showing number of terms taught, it will be seen that a large number of the teachers were immature, with practically no professional training other than the one semester of pedagogy offered in the normal training course of the high school, and with no training

or experience that would help them to adapt the work of the school to the needs of the pupils or to do constructive work in the community.

WHERE EDUCATION WAS RECEIVED.

The following table shows the normal schools where the teachers had received their education. None of these schools, at the time the teachers attended them, offered courses especially fitting teachers for rural work.

TABLE 7.—*Normal schools attended.*

Number of district.	Teachers reporting.	Peru.	Kearney.	Fre-mont.	Junior normal.	Wayne.	Outside State.	Chad-ron.	St. Paul.
First.....	176	167	2	4			2	1	
Second.....	50	23	2	15		4	1		
Third.....	151	25	31	24	3	65			
Fourth.....	232	118	47	36	27	1	2		1
Fifth.....	211	54	116	4	60	2	5		
Sixth (east half).....	151	25	48	32		35	9	2	
Total.....	1,001	417	246	115	90	110	19	3	1
Per cent.....	100	42	25	11	9	10	2		

1 Abandoned.

EDUCATIONAL PREPARATION OF RURAL TEACHERS

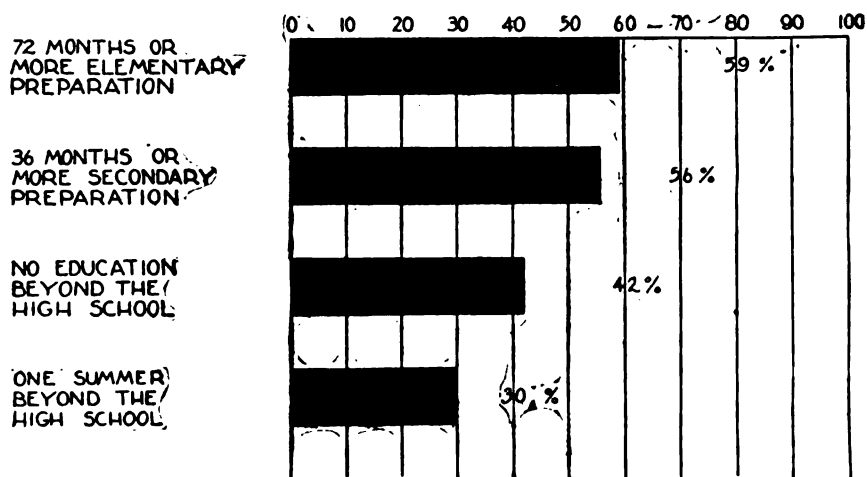


FIG. 4.

It is evident from a study of the above table that the selection of a normal school was determined by residence. The teachers in the first district usually attended Peru; those in the third, Wayne; and those in the fifth, Kearney; etc.

Two hundred seventy-two teachers reported attendance at colleges or universities. Eleven per cent reported colleges outside the State. The remaining 89 per cent included practically every col-

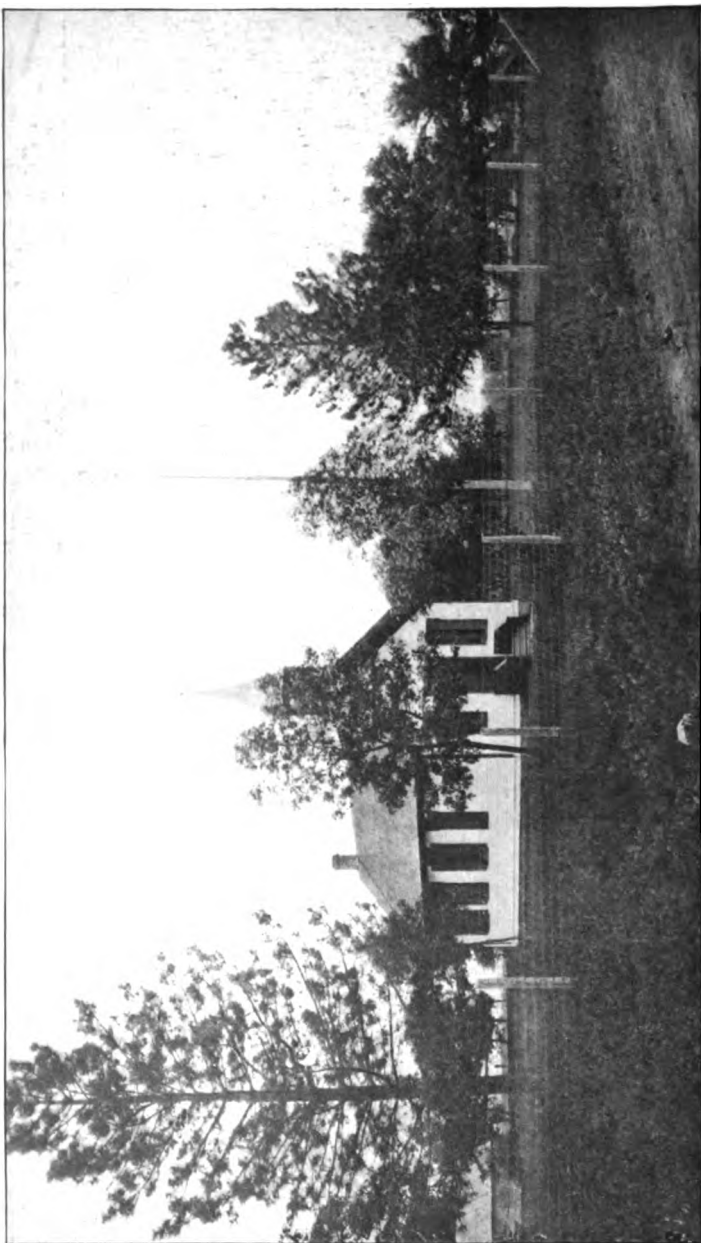


A. TYPICAL RURAL TEACHER OF NEBRASKA.

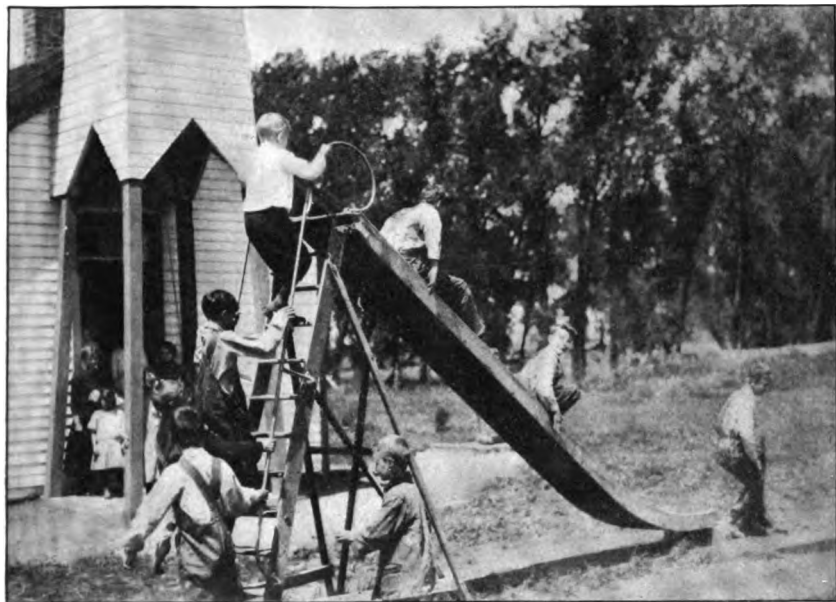
Twenty-one years old; high-school graduate; one summer in normal school; two years' experience.



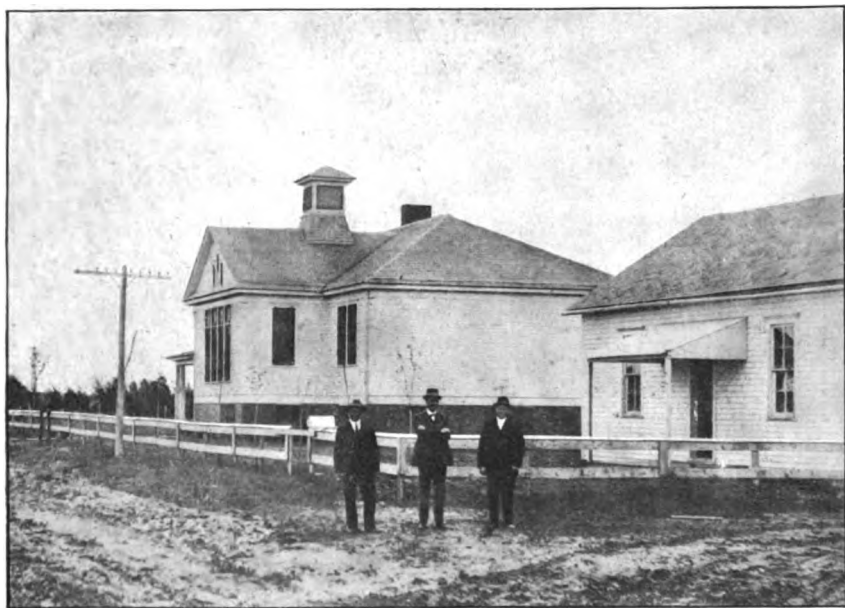
B. A NEW RURAL BUILDING STANDARD IN ALL RESPECTS. IN COLFAX COUNTY.



A WELL-KEPT SCHOOLHOUSE IN DODGE COUNTY.



A. PLAY-GROUND APPARATUS IN A RURAL SCHOOL YARD IN MERRICK COUNTY.



B. JANESVILLE RURAL SCHOOL AND TEACHERAGE. FOUR AND ONE-HALF MILES NORTHWEST OF ANSLEY, CUSTER COUNTY.



A. A MERRICK COUNTY SCHOOLHOUSE.

Built in 1912; heated by a furnace, and furnished with adjustable seats.



B. A CLAY COUNTY SCHOOLHOUSE.

Built in 1873; 30 years ago it was also the social and religious center of the neighborhood.

lege within the State. The following are rankings for the highest five:

	Num- ber.	Per cent.
Wesleyan.....	83	30
State University.....	83	30
York.....	28	10
Hastings.....	13	5
Cotner.....	8	3

It was clear, then, that these teachers were Nebraska products so far as their normal and college education was concerned. The data also verified the same condition relative to their secondary and elementary education.

SUBJECTS STUDIED.

Nine hundred fifty-three teachers reported on the subjects they had studied. These represented the first, second, and third congressional districts. The answers were very incomplete in most instances. The tendency was to report high-school and college subjects rather than the subjects taught in the elementary school. One interesting feature of the tabulation was the great number of subjects listed. The following quotation is from Miss Lathrop's study of the first and second districts:

These rural teachers had "studied at" about every subject mentioned in a university catalogue. There were the five essentials, the vernacular, foreign languages, natural and physical sciences, mathematics, history, the Bible, music, art, manual training, domestic science, stenography, electricity, law and medicine. One hundred and twenty-two subjects were reported in Douglas County alone. Lancaster County teachers enumerated 97 branches. Both of these counties reported 19 kinds of history.

PROFICIENCY AND PREFERENCE OF SUBJECTS.

Replies upon proficiency and preference were tabulated from all but the third congressional district. The range of subjects was as comprehensive as the list of subjects studied. The results of the tabulation are assembled below for the first 10 rankings of subjects in both proficiency and preference.

Proficiency and preference of subjects.

Proficiency.			Preference.		
Subject.	Number.	Per cent.	Subject.	Number.	Per cent.
Arithmetic.....	1,934	24	Arithmetic.....	1,913	23
Grammar.....	1,587	19	Grammar.....	1,440	18
History.....	978	12	Reading.....	1,205	15
Reading.....	849	10	History.....	1,007	12
Physiology.....	695	9	Geography.....	693	9
Geography.....	651	8	Physiology.....	574	7
Spelling.....	433	5	Agriculture.....	332	4
Agriculture.....	266	3	Spelling.....	317	4

The data above warrant the statement that these teachers felt most proficient in arithmetic and liked to teach it best.

It is significant that 114 reported proficiency in Latin, 108 in all subjects, 74 in modern languages, 21 in professional subjects, 9 in nature study, and 115 in civics.

The teacher from Otoe County, who felt most proficient in zoology, had studied the subject 5 hours a week for one semester. The one most proficient in German was 17 years old and had studied the subject one year in a high school that maintained a three-year course. Similar conditions were found for those who felt proficient in psychology, pedagogy, and other professional subjects.¹

In preference to teach, it is also significant that 87 reported all subjects, 29 home economics, 28 Latin, 12 modern languages, 27 nature study, and 87 civics. In making a choice of subjects beyond the rural school, teachers may have in mind the subject they hoped to teach later.

EXPERIENCE IN AGRICULTURE.

In judging the preparation of teachers for rural work it is necessary to consider the experiences of these teachers in the industrial activities pertaining to the farm. If rural children are to be taught in terms of rural life activities, teachers must have an experience of these activities rather than a superficial textbook knowledge of them. If the work of the rural school is to be vital in the life of the children, it must first be vital in the life of the teacher, and this condition can become true only through experience.

Table 8 shows the experience in agriculture. Of the 3,278 teachers reporting, only 1,343 were impressed with the importance of this question to such an extent as to make a report. Of this number, only 21 per cent said that they had actual experience in agriculture, and only 51 per cent of the number reporting "yes," mentioned actual work on the farm. The answers indicated that the teachers had only a limited amount of training for work in agriculture. This data should be compared with that showing sex of the teachers, in Chapter II; with that showing years lived in the country, in Chapter VII, and with the data, in Chapter IV, telling those who expected to continue teaching in rural schools. Ninety per cent of the teachers were women; 36 per cent had lived from 1 to 20 years in the country, and 43 per cent stated that they expected to continue teaching in the country, and only 21 per cent said that they had actual experience in agriculture. These are the teachers who are to vitalize the work in the rural schools, and to teach boys and girls in terms of country life.

¹ Lathrop. Status of the Rural Teacher in the First and Second Congressional Districts. Page 70.

TABLE 8.—*Experience in agriculture.*

Number of district.	Have you had actual experience in agriculture?		
	Teachers reporting.	Yes.	No.
First.....	161	27	134
Second.....	46	8	38
Third.....	355	43	312
Fourth.....	221	67	154
Fifth.....	306	73	233
Sixth (east half).....	254	66	188
Total.....	1,343	284	1,059
Per cent.....	100	21	79

EXPERIENCE IN DOMESTIC SCIENCE.

Only 1,593 teachers, out of 3,278, answered this question. The table indicates that only 28 per cent reported any experience in this line. From a study of the answers the nature of the work seemed to be largely in the home. Thirty-four per cent, or 154 teachers, of those answering "yes" reported that they had studied the subject. About one-third of this number gave the amount of school time spent in the preparation of the subject. This was one year or less for 74 per cent of the teachers reporting.

TABLE 9.—*Experience in domestic science.*

Number of district.	Teachers reporting.	Yes.	No.
First.....	228	50	178
Second.....	43	15	28
Third.....	347	55	292
Fourth.....	279	113	166
Fifth.....	394	129	265
Sixth (east half).....	302	91	211
Total.....	1,593	453	1,140
Per cent.....	100	28	72

EXPERIENCE IN MANUAL TRAINING.

In Table 10, showing experience in manual training, it is not surprising, when the sex table in Chapter I is kept in mind, to find that only 10 per cent reported experience in this line of work. Here, again, the amount of training and experience is seen to be very limited. It is interesting to compare this and the preceding table with those in Chapter VII, showing the number who do work in their schools in manual training and home economics, the number who serve hot lunches, and the attitude of the teachers toward these subjects as a part of the rural-school work. These tables indicate that a very small per cent of the boys and girls in the intermediate and grammar grades have an opportunity to do work in these practical subjects. It is evidently more important that they should be prepared to pass the eighth-grade examinations in the academic subjects.

TABLE 10.—*Experience in manual training.*

Number of district.	Teachers reporting.	Yes.	No.
First.....	300	36	264
Second.....	70	7	63
Third.....	525	30	495
Fourth.....	380	50	330
Fifth.....	556	65	491
Sixth (east half).....	387	39	348
Total.....	2,218	227	1,991
Per cent.....	100	10	90

Seventy-one per cent of those who reported experience in manual training stated that this experience was in school. Ninety-one per cent of those reporting "yes" stated that this instruction was one year or less.

EXPERIENCE IN SOCIAL SETTLEMENT.

Table 11 shows that 92 per cent have had no experience in social settlement work, and replies to this question show quite a general failure to grasp the meaning of the term.

From every platform of rural life conferences and from the printed page offering suggestions for the betterment of the country is heard the call for rural leadership. Exploiters and ill-informed persons are going up and down the country urging that the rural teacher become this community leader, without taking into consideration who the real rural teacher is.¹

TABLE 11.—*Experience in social settlement work.*

Number of district.	Teachers reporting.	No.	Yes.
First.....	315	291	24
Second.....	72	65	7
Third.....	550	537	12
Fourth.....	396	348	48
Fifth.....	563	513	50
Sixth.....	394	347	47
Total.....	2,290	2,201	189
Per cent.....	100	92	8

The nature of the experience was through churches, clubs, settlements, and study.

CERTIFICATE HELD.

Table 12 shows the kind of certificate held. It will be seen from this that 68 per cent did not have a certificate better than the county second grade. The following subjects are required by law for a second-grade certificate: Orthography, reading, penmanship, geography, arithmetic, physiology and hygiene, English composition, English grammar, United States history, civil government, book-keeping, blackboard drawing, theory and art of teaching, and agri-

¹ Lathrop. Status of the Rural Teacher in the First and Second Congressional Districts. Page 96.

culture. As a professional requirement the law specifies that a teacher must have eight weeks' normal training or one year of teaching experience. In many of the counties of the State, the third-grade certificate is not accepted, so that the second-grade certificate virtually represents the minimum requirement. It is significant that 61 per cent do not have more than the minimum requirement. In this number, however, are many high-school graduates who are teaching their first school. It will be seen by looking over the requirements for this second-grade certificate that the academic training is really the least possible that will fit for the subjects taught in the rural schools, the professional training is very meager indeed, and is very ineffective when given to girls as immature as the age table in Chapter II.

MONTHS TAUGHT IN RURAL SCHOOLS.

The first, second, and fourth congressional districts only are included in the returns for this item, with a total of 1,010 teachers reporting. Of this number, 385, or 38 per cent, show from one to 10 months of rural teaching experience; 227, or 23 per cent, show from 11 to 20 months of such experience; 164, or 16 per cent, 21 to 30 months; 96, or 10 per cent, 31 to 40 months; 64, or 6 per cent, 41 to 50 months; 22, or 2 per cent, 51 to 60 months; 14, or 1 per cent 61 to 70 months; 13, or 1 per cent, 71 to 80 months; and 25 teachers, approximately 3 per cent, show from 81 to more than 121 months of rural teaching experience.

When the results of this inquiry are compared with those of the following table, which indicates the number of rural teachers who have had teaching experience in the grades of village or town schools, it seems clear that the country is the "training camp" for town and city teachers. In the first and second districts 419 teachers said they had had more or less rural teaching experience, but only 71 teachers in those two districts have had any "grade school" experience in village or town. In the fourth district only 54 teachers, 9 per cent, said that they have had village or town experience. According to the data 61 per cent of all teachers reporting rural experience show that this is gained in one or two terms of country school teaching, ranging from 1 to 20 months in time. The median number of months taught in rural schools was 16.28 months, for the first, second, and fourth districts.

TABLE 12.—*Certificate held.*

Number of districts.	Teachers reporting.	Emergency.	County.			City.			State.		
			Third.	Second.	First.	Primary.	City grade.	Kind not designated.	Elementary.	First grade.	Professional.
First.....	436	.....	12	302	90	.....	.....	.....	19	10	3
Second.....	114	.....	1	74	28	.....	.....	.....	6	3	2
Third.....	550	.....	21	312	190	.....	.....	.....	20	.....	7
Fourth.....	597	.....	25	362	174	1	1	.....	27	.....	7
Fifth.....	911	5	85	539	226	1	.....	5	35	4	11
Sixth (east).....	633	6	90	404	121	1	.....	.....	4	2	5
Total.....	3,241	11	234	1,963	829	3	1	5	111	19	25
Per cent.....	100	.....	7	61	25	.....	.....	.....	3	(1)	2

¹ Almost 1 per cent.

SUMMARY.

The data given in the chapter are summarized as follows: Forty-one per cent of the teachers had less than 72 months' preparation in the elementary schools; 56 per cent had 36 months or more in the secondary schools; and 42 per cent had no preparation beyond the high school. Thirty per cent had attended normal schools or college one summer, and 23 per cent had attended from six months to three years. Four had been graduated from normal school and four from colleges or universities. The teachers had received their education in Nebraska institutions. The list of subjects studied, for the most part, comprised those of the high school and college rather than the elementary school. The list was very comprehensive, containing about every subject listed in a university catalogue. The teachers felt most proficient in arithmetic and also liked to teach it best. Twenty-one per cent reported experience in agriculture, 28 per cent experience in domestic science and 10 per cent experience in manual training. Ninety-two per cent had no experience in social service. Sixty-one per cent held a county second-grade certificate.

CHAPTER IV.

EXPERIENCE.

The movement to secure a more efficient and better qualified teaching corps for the rural schools of the Nation has, in the main, stressed the need for a more adequate and extensive academic fitness. A scholastic preparation, adapted especially to the demands of rural life and the country school has afforded the center about which most training-school programs have been made. There are schools, however, where actual "experience in teaching" has been accorded a real and vital place in the modern scheme of rural-teacher training. Doubtless the future will find normal schools, normal training high schools, and other training agencies making larger use of the affiliated rural school as a laboratory, where actual school problems may be experienced at first hand by teachers in training, under the expert guidance of those specially qualified and fitted to give such direction.

Experience, however, as comprehended in the present chapter, implies little or no expert supervision, but, on the contrary, represents the efforts of the teacher as measured in point of "time spent," to work out alone in the school of "hard knocks" the multitudinous problems with which she finds herself confronted. Here, indeed, is necessity, again, the mother of invention.

TOTAL NUMBER OF TERMS TAUGHT.

Out of a total of 3,278 teachers who made response to the questionnaire for this study, 2,926, or 89 per cent, indicated the total number of terms taught. Of this number, 58 per cent, or 1,700 teachers, had taught from one to two terms. The data are not clear, however, relative to length of terms. The beginners were 988 of all the teachers reporting, and represented 33 per cent of the total. Six hundred and seventy teachers, or 23 per cent, gave three or four terms, while 10 per cent, or 293 teachers, showed five or six terms of experience. The remaining 9 per cent were classified as follows: 121 persons, 4 per cent, with 7 or 8 terms; 76 persons, 3 per cent, with 9 or 10 terms; and 66 persons, 2 per cent, ranging from 11 to 35 terms. Five teachers reported long-time experience, two answering that they had taught 28 terms, two 30 terms, and one 35 terms.

As already pointed out, there was nothing to indicate just the amount of time actually included in a "term." Some doubtless had in mind short school periods of three months or more, while some doubtless made the word "term" synonymous with a "year." Miss Lathrop notes in her portion of the study on the status of the rural teacher in Nebraska that "some years ago it was very common

for the school year in the country to be divided into three terms, designated spring, fall, and winter. Quite likely most of the teachers past 40 had experienced the three terms per year schools. The custom of dividing the rural school year into separate terms has practically disappeared in Nebraska."

The median number of terms, for all teachers reporting, was 1.85.

Mr. Weyer's study of the sixth district, a typical section of western Nebraska, points out that most of the teachers who had taught more than 10 years were either holding homesteads or had gone back to teaching as a means of livelihood after marriage. In this same part of the State school terms are increasing in length, made possible through State aid to the weaker districts and a demand that the school term be lengthened.

Table 13, which follows, shows the distribution of teachers by congressional districts, relative to the number of terms taught:

TABLE 13.—*Total number of terms taught.*

Number of district.	Teachers reporting.	Number of terms.											
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23 and over. ¹
First.....	322	181	78	32	8	14	5	3	1				
Second.....	82	35	18	13	8	5		2			1		
Third.....	550	303	126	64	20	21	5	5	2	2			2
Fourth.....	598	343	138	60	24	17	5	4	4		1	1	1
Fifth.....	812	503	197	67	30	7	4	3	1				
Sixth (east half).....	562	335	113	57	31	12	5	2	4			1	2
Total.....	2,926	1,700	670	293	121	76	24	19	12	2	2	2	5
Per cent.....	100	58	23	10	4	3	2						

¹ Two, 28 terms; two, 30 terms; one, 35 terms.

Median, 1.85 terms.

TOTAL NUMBER OF MONTHS TAUGHT.

A total of 7,126 terms was returned by all teachers, exclusive of those in the third congressional district. For the same number of teachers, the total number of months taught was 51,320, making an average term length of 7.2 months.

Table 14 gives the returns, tabulated by congressional districts.

TABLE 14.—*Total number of months taught.*

Number of district.	Total number of terms taught by all teachers.	Total number of months taught by all teachers.
First.....	1,054	7,232
Second.....	342	1,646
Fourth.....	1,836	14,553
Fifth.....	2,110	16,026
Sixth (east half).....	1,784	11,863
Total.....	7,126	51,320
Average.....		7.2

TABLE 15.—*Months taught in rural schools.*

Number of district.	Teachers reporting.	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121 and more.
First and second	419	162	92	72	42	27	6	7	1		2	3	1	2
Fourth.....	591	223	135	92	54	37	16	7	12	4	4	2	2	3
Total.....	1,010	385	227	164	96	64	22	14	13	6	6	5	3	5
Per cent.....	100	38	23	16	10	6	2	1	1	8				

Median, 16.28 months.

EXPERIENCE—VILLAGE AND TOWN SCHOOLS.

It is apparent on the face of the returns that villages, towns, and cities do not send their teachers in any considerable numbers to the rural school. Out of a total of 3,278 teachers responding to the questionnaire, only 193 for the entire State reported village school teaching experience. This is slightly less than 6 per cent. Out of this number, 26 teachers, or 14 per cent, gave less than one year of village experience; 130 teachers, or 67 per cent, had the advantage of from one to two years of such experience; and 23 teachers, or 12 per cent, reported three to four years. The remaining 14 teachers, 7 per cent of the total, gave village and town experience ranging from 5 to 12 years.

Eighty-eight persons, somewhat less than 3 per cent of the total, claimed town or city teaching experience. The distribution for the number of years of such experience was as follows: 14 teachers, 16 per cent, less than one year; 47 teachers, 54 per cent, from one to two years; 14 teachers, 16 per cent, from three to four years; and 8 teachers, 9 per cent, from five to six years. The remaining five teachers had town or city experience ranging from 7 years to a maximum of 13 years.

TABLE 16.—*Experience—village and town schools.*

Number of district.	Villages.							Towns.								
	Number reporting.	Years.						Teachers reporting.								
		Less than 1.	1-2	3-4	5-6	7-8	9 or over.		Less than 1.	1-2	3-4	5-6	7-8	9-10	11 or over. ²	
First.....	37	3	21	8	1	3	1	16	1	10	2	1	1	.....	1	
Second.....	14	2	9	2	1	.....	.....	4	1	3	.....	.....	.....	.....	.....
Third.....	13	.....	11	1	1	.....	.....	17	.....	9	4	4	.....	.....	.....
Fourth.....	30	7	19	3	1	.....	.....	24	9	11	1	2	.....	1	.....
Fifth.....	75	14	46	9	2	3	1	18	3	6	6	1	1	1	.....
Sixth (east half).....	24	.....	24	.....	.....	.....	.....	9	.....	8	1	.....	.....	.....	.....
Total.....	193	26	130	23	6	6	2	88	14	47	14	8	2	2	1	
Per cent.....	100	14	67	12	3	3	1	100	16	54	16	9	2	2	1	

¹ One 10 years, one 12 years. ² One 13 years.

Instances are few, indeed, which show that teachers have gone from the town and city schools to the country because of the con-

viction that the rural school afforded larger opportunity for service and development. There is evidence, however, to point to the fact that such movement in a rural direction as is found is largely the result of circumstances, following failure in village or town schools, farm demands on the home place, retirement on account of sickness, or death in the family, etc.

EXPERIENCE—GRADES IN VILLAGE AND TOWN SCHOOLS.

Out of the 57 teachers for the first, second, third, and sixth (east half) congressional districts who reported that they had had teaching experience in the grades of village or town schools, only 44 indicated the exact nature or level of this experience. The primary grades were credited with 11 teachers, or 25 per cent of all those making reply. Twelve persons, 27 per cent, gave intermediate grade experience; 16 persons, or 37 per cent, grammar-grade experience; and 3 persons, 7 per cent, high-school experience. One teacher had been a "principal," and another indicated previous teaching in a university position.

In the fourth district there were 19 teachers who gave the grades in which they gained their "town or city experience," the most of these saying "intermediate" or "grammar" grades. One teacher in this district counted experience in a "normal practice school," while another gave the answer "high-school teacher of German." In the fifth district, Mr. Fosnot found that—

two had had primary work; two the second primary; one the elementary work; three had had grades four, five, and six; one had taught grades five and six, four had taught the grammar or seventh and eighth grades; one had had work in the high school; one had been with the Northwestern Business College at Beatrice; and one had been a supply teacher in New Mexico.

TABLE 17.—*Experience—grades in village and town schools.*

Number of district.	Teachers reporting.	Grades.					
		Primary.	Inter-mediate.	Gram-mar.	High school.	Prin-cipal.	Univer-sity.
First.....	9	1	2	4	1	1	
Second.....	3	1	1				1
Third.....	17	7	4	6			
Sixth (east half).....	12	2	5	3	2		
Total.....	44	11	12	16	3	1	1
Per cent.....	100	25	27	37	7	2	2

TENURE IN POSITION.

It has been pointed out that one-third of the teachers of Nebraska were beginners and were therefore teaching their first schools. A total of 1,061 teachers showed a teaching experience in the same school district ranging from 2 to 11 terms. The distribution was as follows: Six hundred and thirty-seven, or 60 per cent, of the teachers had

taught 2 terms in the same district; 261, or 25 per cent, of the teachers, 3 terms; 98 teachers, or 9 per cent, 4 terms; 37 teachers, or 3 per cent, 5 terms; 16 teachers, of 2 per cent, 6 terms; and the remaining 1 per cent, from 7 to 11 terms.

In the sixth district (east half) the average number of terms in the same school district was 1.1 terms; in the fifth district it was 10 months; in the fourth district the average was 2.1 terms; in the third district it was 12.14 months; and in the first and second congressional districts "nearly 33 per cent had taught in consecutive districts, including a period of from 2 to 10 terms. Sixty-seven per cent had changed locations every year."

TABLE 18.—Number of teachers in each county who have taught in the same district the following terms.

Number of district.	Teachers reporting.	Two terms.	Three terms.	Four terms.	Five terms.	Six terms.	Seven terms.	Eight terms.	Nine terms.	Ten terms.	Eleven terms.
First	134	81	34	11	3	3				2	
Second	32	18	7	4	1	1		1			
Third	126	86	36	4							
Fourth	251	187	37	20	4	2					1
Fifth	403	192	117	43	28	10	4	1	3		
Sixth (east half)	115	73	30	11	1						
Total	1,061	637	261	98	37	16	4	2	3	2	1
Per cent.	100	60	25	9	3	2					

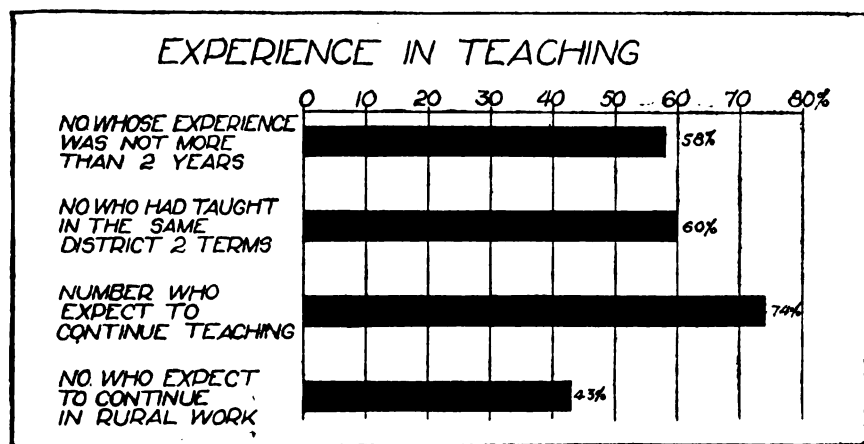


Fig. 5

CONTINUANCE IN TEACHING PROFESSION.

Out of a total of 3,134 teachers in the State, there were 2,322 who expressed their purpose to continue in the work of teaching. This was 74 per cent of those replying. Another 10 per cent, representing 299 persons, were "undecided," while 513, or 16 per cent, indicated their intention to discontinue teaching. There is nothing in the information given by those answering the query in the affirmative to show how long a continuance of the work of teaching was anticipated.

Of the teachers reporting on "purpose to continue" in teaching, 2,290 made clear the kind of work anticipated. Only 43 per cent, 984 teachers, elected the rural school; 2 per cent said "undecided." The remaining 55 per cent looked forward to positions in the grades, or special departments of village and city schools. The following tabulation indicates the distribution of work sought:

984 teachers, 43 per cent—rural.
 364 teachers, 16—grades (not differentiated).
 335 teachers, 16—primary.
 91 teachers, 4—intermediate.
 68 teachers, 3—grammar.
 181 teachers, 8—high school.
 165 teachers, 7—special subjects.
 49 teachers, 2—undecided.

One teacher looked forward to college teaching and another to becoming a special supervisor of music.

TABLE 19.—Continuance in teaching.

Number of district.	Teachers reporting.	Purpose.			Line.									
		Yes.	No.	Undecided.	Teachers reporting.	Rural.	Grades.	Primary.	High school.	Special subjects.	Intermediate.	Grammar.	Undecided.	Superior.
First.....	434	319	58	57	304	123	76	52	13	25	.....	.....	13	2
Second.....	114	91	11	12	102	43	18	17	4	15	.....	.....	8	.....
Third.....	527	394	108	21	396	191	76	74	47	1	.....	.....	.....	.....
Fourth.....	577	432	87	58	441	181	51	83	27	49	.....	15	8	10
Fifth.....	896	680	147	71	622	251	51	94	50	44	.....	39	21	3
Sixth (east half).....	584	402	102	80	425	195	92	38	40	10	24	16	.....	.....
Total.....	3,134	2,322	513	299	2,290	984	364	355	181	165	91	68	49	17
Per cent.....	100	74	16	10	100	43	16	16	8	7	4	3	2	1

SUMMARY.

The median number of terms taught was 1.85. The average length of term, computed for all districts, except the third, was 7.2 months. The median number of months taught in rural schools (computed for three districts) was 16.28. Only 281 of 3,278 teachers reported experience in village and town schools. The maximum length of time for both village and town schools was from one to two terms. Only 44 teachers reported the grade of experience in village or town. Twenty-five per cent of this experience was in the primary grades, 27 per cent in the intermediate grades, and 37 per cent in the grammar grades. Of the 1,061 teachers who reported teaching in the same district more than one year, 60 per cent had taught two terms in the same district. On their purpose of continuance in the profession 3,134 teachers reported. Of this number 74 per cent expressed a desire for continuance. Forty-three per cent of those reporting on the line of work to be followed selected the rural school.

CHAPTER V.

THE BOARDING PLACE.

COST OF BOARD AND ROOM.

Table 20 shows a compilation of the data secured from the various congressional districts on the cost of board and room. The reports for the first, second, third, and fourth congressional districts are grouped together and form Division A of the table. This was done for the reason that these districts reported the yearly cost of board and room. The results from the fifth and sixth congressional districts gave the monthly cost of board and room. These tabulations are grouped in Division B of the table. The total number of teachers responding from the first, second, third, and fourth congressional districts was 1,704; 1,643 of these reported on board and room. This was 96 per cent. Three hundred and twenty, or 20 per cent, of these teachers lived with parents or relatives where board and room cost nothing. One interesting feature in the tabulation of this item was the great variety of prices paid for board. The extremes were a minimum of \$5 and a maximum of \$300. Often explanations followed where the amount was unusually low or unusually high. Some times the small cash value was increased by an addition of labor. Often the small amount paid for board represented board paid during the winter months when it was impossible to drive back and forth from school and home. A teacher who paid \$54 for board added: "Help milk and get supper." The teacher paying \$300 supported two children. One said: "Give my mother \$5 a month." The median for the year for those paying board was \$114.80. (Table 20, Division A.)

TABLE 20.—*Division A—Yearly cost of board and room (four districts).*

Number of district.	Teachers reporting on cost of board.	Nothing. Board at home.	\$96 or less.	\$97- \$106.	\$107- \$116.	\$117- \$126.	\$127- \$136.	\$137- \$146.	\$147- \$156.	\$157- \$166.	Over \$166.
First and second.....	543	104	91	10	129	83	54	45	5	8	14
Third.....	529	81	134	1	151	79	25	45	2	6	5
Fourth.....	571	135	96	8	132	89	36	51	18	3	8
Total.....	1,643	320	321	19	412	251	115	141	25	17	22
Per cent.....	100	20	20	1	25	15	7	9	1	1	1

Median for those paying board—\$114.80.

TABLE 20.—*Division B—Monthly cost of board and room (two districts).*

Number of district.	Number reporting on cost of board.	Nothing. Board at home.	\$8 or less.	\$9-\$10.	\$11-\$12.	\$13-\$14.	\$15-\$16.	\$17 and over.
Fifth.....	887	220	8	48	221	160	174	56
Sixth (east half).....	611	99	11	85	197	114	87	18
Total.....	1,498	319	19	133	418	274	261	74
Per cent.....	100	21	1	9	28	18	18	5

Median for those paying board—\$14.42.

Of the 1,574 teachers from the fifth and sixth congressional districts 1,498, or 98 per cent of the entire number, responded on monthly amount paid for board. (Table 27, Division B.) The monthly amount paid for board for these teachers ranged from \$7 to \$24. The median was \$14.42. In the studies from the various congressional districts the average was computed rather than the median except in the fourth congressional district, where both an average and median were derived.

According to the studies on the separate congressional districts, the yearly average for the first and second congressional districts was \$111.88; for the third, \$112.88; the fourth, \$114.66; the fifth, \$109.51; and the sixth, \$98.15. Mr. Lefler found the median for the fourth congressional district to be \$112. It would seem, then, that the median of \$114.80 found on four congressional districts is a representative estimate for the State as a whole.

MONTHS UPON WHICH BOARD WAS PAID.

In the first and second congressional districts the tabulations were given on the number of months upon which board was paid as well as the aggregate number of months. The results are indicated below.

TABLE 21.—*Months upon which board was paid.*

Districts.	Total teachers reporting.	Total teachers replying on months.	Three months.	Five months.	Six months.	Seven months.	Eight months.	Nine months.
First and second....	554	425	5	2	12	10	22	374

Median, 8.4 months.

In the fifth and sixth congressional districts the aggregate number of months as well as the average was given. These were as follows:

TABLE 22.—*Monthly board for fifth and sixth districts.*

District.	Total number of teachers responding to the blanks.	Teachers replying on months board was paid.	Aggregate.	Average.
Fifth.....	928	637	5,074	7.97
Sixth (east half).....	646	495	3,762	7.66

In the third and fourth congressional districts the number of months upon which board was paid was not given. The median for the first and second districts exceeds the averages for the fifth and sixth districts. Two factors account for this. First, the extreme cases represented, and second, the districts upon which the averages were found are less sparsely settled than the first and second districts, and consequently contain more short-term schools. The results indicate that the majority of teachers paying board were paying this board on the entire school term, which from the median given in the first and second congressional districts and the averages given in the fifth and sixth congressional districts is approximately eight months. The median number of months upon which income was received, based on four districts (Chapter VI), was 8.4. The median yearly income on these same four districts, as given in the same chapter, was \$445.28; the median yearly board of \$114.80 is also for these same four districts. The balance of \$330.48 must be used to pay board for four months, when out of employment, to pay for clothing and professional upkeep, as well as other minor items that make up the sum total of "living expenses." When an attempt is made to estimate all these points, the difference is infinitesimal if not zero or minus zero, and only those teachers whose support is complemented by parents or relatives or those who seek other employment during vacation can afford to teach in the country. Former chapters in this study show the rural teacher of Nebraska to be limited both in educational qualifications and experience. The amount she receives is probably all her education and experience merit. The status on this point is well expressed in the words of the Tennessee farmer school officer who said: "I am willing to pay more salary, but not for what we get."

PRIVATE ROOMS AND HEAT.

Of the 3,278 teachers reporting on the questionnaires, 2,987, or 91 per cent, indicated whether they occupied rooms by themselves. Of this number, 2,256, or 76 per cent, indicated that they had a room

by themselves. Table 30. The percentage of teachers having rooms by themselves was higher in the more thickly settled portions of the State than in the sparsely settled districts. In the first, second, and fourth districts the percentage was 80; in the third, 77; the fifth, 75; and in the sixth, only about 66. Privacy, rest, and physical comfort are important factors in determining the efficiency of the teacher's service.

The heating of this high percentage of rooms must be considered before it can be determined whether these teachers had a place for quiet study during the evening. Nebraska lies between parallels 40° and 43° north latitude. It has a yearly average temperature of 46° for its northern part and between 50° and 52° for its southern part.¹ School is in session during the colder portion of the year, and with the exception of a few weeks in the fall and spring artificial heat must be supplied in dwelling houses. Table 23 shows that 2,940 of the 2,987 teachers reporting on rooms by themselves told whether those rooms were heated. In 67 per cent of the cases the rooms were not heated. Sometimes the only heat was that which came from the room below by means of a register in the floor. One teacher qualified her statement of heat by saying that it was furnished by a stove-pipe which passed through the room. Some of the rooms were heated by oil stoves, and in a few cases these stoves were furnished by the teachers themselves. Mr. Lefler found 1.6 per cent of the teachers reporting in the fourth congressional district using oil stoves. The tabulations in Table 23 indicate that the majority of teachers had no place for study and relaxation.

TABLE 23.—*Private rooms and heat.*

Number of district.	ntire room for self.			Rooms with heat.		
	Teachers reporting on rooms.	No.	Yes.	Teachers reporting on heat.	No.	Yes.
First.....	413	80	333	404	249	155
Second.....	110	24	86	110	57	53
Third.....	527	121	406	521	335	186
Fourth.....	544	106	438	540	323	217
Fifth.....	824	202	622	820	575	245
Sixth (east half).....	569	196	371	539	418	121
Total.....	2,987	731	2,256	2,940	1,957	983
Per cent.....	100	24	76	100	67	33

BATH FACILITIES.

In tabulating the answers on bath facilities "good" and "splendid" were interpreted as "modern." The replies were varied and in many instances indicated why so many teachers did not spend the week end in the district. The following are some of the answers

¹ Condra. Geography of Nebraska. Page 33.

that might appear humdrum if they were not so real: "Washbowl," "washtub," "tin washbasin in the kitchen," "soap and water," "teacup and handkerchief," "unheard of," "go home to bathe." Table 24 indicates that 2,438 of the teachers reported on bath facilities. This is 89 per cent. Of this number, 68 per cent were classed as "not modern." Three reported a private bath in connection with the room. The 32 per cent living in modern homes can not be considered as meaning that so high a per cent of rural homes are modern so far as bath facilities are concerned. Allowances must be made for teachers who drove back and forth from their homes in town. Mr. Lefler made a study in the fourth congressional district of a comparison of the number of children in different families and the distribution of bath facilities. He found the following:

In homes with no children, 53 have some bathing facilities while 85 have none; in homes with one child, 38 some, 53 none; with two children, 35 some, 56 none; three children, 23 some, 45 none; four children, 19 some, 43 none; five children, 10 some, 14 none; six children, 10 some, 9 none; seven children, 4 some, 3 none; and eight children, 4 some, 7 none. In each of the five families reporting nine children, the bath queries were answered in the affirmative, but two out of the three families with 10 children do not have bathing facilities. The one family with 11 children and likewise the one with 12 children do not have modern conveniences in this respect.

In commenting on this fact, he says:

One might conclude in a priori manner that home conditions will be gradually improved as the children of newer generations grow to manhood and womanhood and establish living conditions for themselves. A comparison of the number of children in different families and the distribution of both facilities do not seem to justify such decision. It is probable that young people just setting up housekeeping either occupy the old home place, with the house as their parents have used it, or build only enough to meet their immediate needs, looking to the future for the installation of modern conveniences.¹

TABLE 24.—*Bath facilities.*

Number of district.	Teachers reporting on bath.	Not modern.	Modern.
First.....	368	243	125
Second.....	102	73	29
Third.....	591	442	149
Fourth.....	475	292	183
Fifth.....	730	498	232
Sixth (east half).....	172	101	71
Total.....	2,438	1,649	789
Per cent.....	100	68	32

CHILDREN IN THE HOMES.

On this item 2,936 teachers reported. This was more than 89 per cent of the entire number reporting. Of this number, 72 per cent of the teachers boarded in homes where there were children. Twenty-

¹ Lefler. *Status of the Rural Teacher in Nebraska*. Pages 233-240.

seven per cent of the homes had one child; 24 per cent, two children; 19 per cent, three children; 13 per cent, four children; and in the remaining 17 per cent, the number of children ranged from 5 to 12. The median was two children. The significant fact of this is apparent only when considered with the results found on heat in the homes. These teachers, having no place for privacy, must spend their evenings in the family living room. There they are not only associated with the parents and hired help, but very often with children enrolled in school.

TABLE 25.—*Children in homes.*

Number of district.	Teachers reporting on children.	Homes with children.	Homes without children.	Number where teachers board.										Total number of children in homes.
				1	2	3	4	5	6	7	8	9 and over.		
First.....	407	277	130	89	73	52	28	16	10	2	1	6	277	
Second.....	111	84	27	21	21	22	4	6	6	1	2	1	84	
Third.....	525	387	128	103	94	67	53	35	11	7	12	5	387	
Fourth.....	539	403	136	103	94	69	65	25	18	20	4	5	403	
Fifth.....	803	567	236	143	154	116	74	32	16	20	8	4	567	
Sixth (east half).....	551	409	142	103	78	84	55	33	24	12	13	7	409	
Total.....	2,936	2,127	809	562	514	410	279	147	85	62	40	28	2,127	
Per cent.....	100	72	28	27	24	19	13	7	4	3	2	1	100	

Median—2 children.

THE BOARDING PLACE

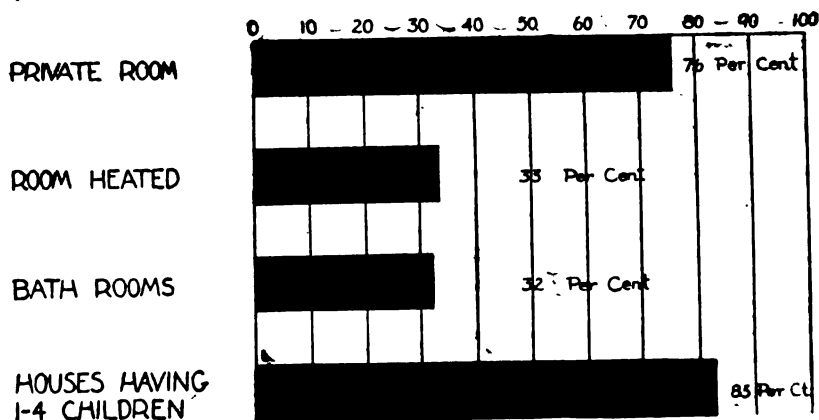


Fig. 6.

EVOLUTION OF THE TEACHERAGE.

In the early history of public education a home for the teacher was solved by "boarding round." Records show that the custom existed in Europe as early as 1648 and continued late into the nineteenth century. It still exists in the Old World in the case of peripatetic teachers of Scandinavia. The practice was transplanted, by

the early colonists, upon the American soil and flourished here until about the middle of the nineteenth century.¹ It is characteristic of frontier conditions and practically disappeared in both Europe and America as wealth and population increased. The custom existed in Nebraska in frontier days.² With the increase of teachers' salaries came the extinction of "boarding round." The next step was that the teacher provide her own bed and board with some family in the neighborhood. This practice, as has been pointed out in this chapter, is practically universal in the rural schools of Nebraska. The same is true for the United States in general. Reports from all parts of the United States show that it is becoming more and more difficult for rural teachers to get satisfactory boarding places.³ The same is true in Canada according to a recent investigation.⁴ To meet this exigency the teacher's cottage has been born in America. Homes for teachers are provided at public expense in most European countries. Investigations made by the United States Bureau of Education show that such homes exist in one form or another in most of the States of the United States. The States of Texas and Washington rank among the first.

One teacher's home has existed in a rural district in Hall County, Nebr., since 1894. The last report from the State superintendent's office reports nine teachers' cottages in the State.⁵ The teacher's cottage has been most successful in Europe, where the majority of the teachers are married men. It is proving most successful in this country as a necessary adjunct of the consolidated school plant. In a State where 90 per cent of the teachers are women with a median age of 21, it can hardly become a very effective remedy to the boarding problem in rural districts. The outgrowth of frontier conditions, the increase in teachers' salaries, the changes in standards of living, the present-day awakening along the lines of public health, and the consolidated school are the factors that have contributed to this evolution from "boarding round" to the teacherage.

SUMMARY.

Reports from 96 per cent of the teachers in the first, second, third, and fourth congressional districts indicated that the median of \$114.80 was a fair estimate, for the State as a whole, of the amount paid per school year for board. The number of months upon which board was paid was given for the first, second, fifth, and sixth districts. A median of 8.4 months was computed for the first and

¹ Monroe. *Cyclopedia of Education*. Vol. 1, pp. 403-4.

² Sheldon. *History and Stories of Nebraska*. Page 244.

³ Kellogg, R. S. *Teachers' Cottages*. Pages 23-53.

⁴ Miller. *Rural Schools in Canada*. Page 66.

⁵ Thomas. *Biennial Report of State Superintendent, 1916*. Pages 42-43.

second districts, and an average of 7.97 and 7.6 months, respectively, for the fifth and sixth districts. From these data it is clear that board was paid for approximately 8 months. Computations from the data indicate that \$330.48 represented the residue of the teacher's yearly salary after paying board for 8.4 months. This balance was left for clothing, board during the vacation months, professional upkeep, and incidentals. Seventy-six per cent of the teachers occupied rooms by themselves, 33 per cent had heated rooms, and 68 per cent reported no bathing facilities other than the washbowl. The last report of the State superintendent's office indicates nine teachers' cottages in Nebraska.

CHAPTER VI.

INCOME.

YEARLY INCOME.

The yearly income was given in the first, second, third, and fourth districts, 1,684, or 97· per cent, of the teachers responding. The median yearly salary based on the four districts above was \$445.28. (Table 26, Division A.) The average salaries for the individual districts are as follows: First and second, \$513.78; third, \$458.25; fourth, \$441.

TABLE 26.—*Division A—Yearly salary (four districts).*

Number of district.	Teachers reporting.	Less than \$400.	\$401-410.	\$411-420.	\$421-430.	\$431-440.	\$441-450.	\$451-460.	\$461-470.	\$471-480.	\$481-490.	\$491-500.	Over \$500.
First and second (men).....	38	7	5	.....	2	2	10	.....	1	2	.....	5	7
First and second (women).....	497	83	88	2	13	8	157	1	2	8	1	63	71
Third.....	535	81	49	6	4	4	228	.....	8	.....	73	82	
Fourth.....	584	115	84	3	2	17	195	1	2	17	.....	76	72
Total.....	1,654	286	226	11	21	31	590	2	4	33	1	217	232
Per cent.....	100	17	14	1	1	2	36	.....	.....	2	.....	13	14

Median yearly income, \$445.28.

TABLE 26.—*Division B—Monthly salary (two districts).*

Number of district.	Teachers reporting on monthly salary.	\$40 or less.	\$41-45.	\$46-50.	\$51-55.	Over \$55.
Fifth.....	899	73	202	380	149	95
Sixth (east half).....	578	67	182	252	57	20
Total.....	1,477	140	384	632	206	115
Per cent.....	100	9	26	43	14	8

Median, \$47.69.

In the individual studies for the fifth and sixth districts the monthly salary rather than yearly salary was computed. The tabulation in Table 26, Division B, indicates this to be \$47.69.

MONTHS UPON WHICH SALARY WAS RECEIVED.

The number of months upon which salary was received was tabulated for the first, second, third, and fourth districts. Of the 1,704 teachers responding to the questionnaires from these districts,

1,643, or 96 per cent, reported. Eighty-five per cent of these teachers received an income for 9 months. The median was 8.4 months. The details are given in the table below.

TABLE 27.—*Income—Number of months salary was received.*

Number of district.	Teachers reporting.	3	4	5	6	7	8	9
First and second (males).....	38	.....	.....	1	.....	2	2	33
First and second (females).....	503	.....	.....	.....	5	9	34	455
Third.....	540	1	1	.....	2	3	79	449
Fourth.....	562	.....	2	.....	7	15	80	458
Total.....	1,643	1	3	1	14	34	195	1,806
Percent.....	100	.....	.....	.....	1	2	12	85

Median, 8.4 months.

YEARLY INCOME OF TEACHERS

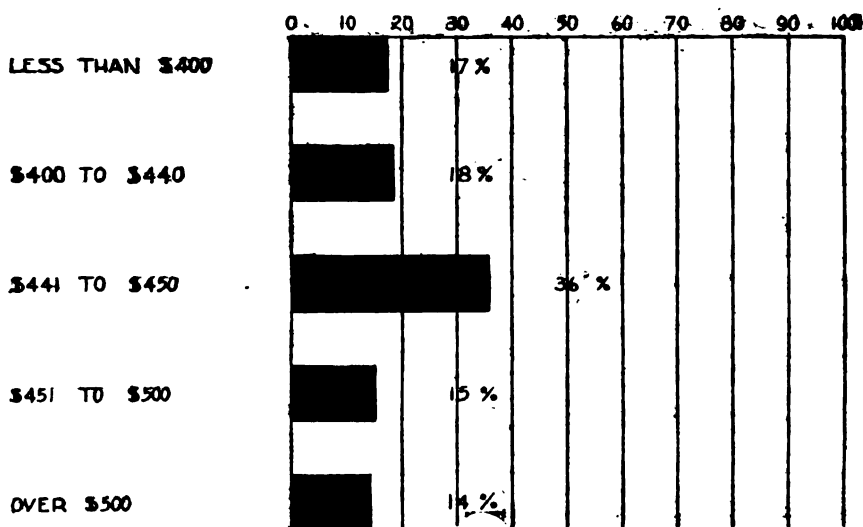


Fig. 7.

HOW THE VACATION WAS SPENT.

The total number of teachers answering this question can not be given, for the reason that the number was not reported for the fifth district. Some teachers enumerated several ways in which the vacation was spent. In all, 3,267 ways were reported by all the teachers; 44 per cent said that they remained at home; 30 per cent spent the time in school or study; 15 per cent in travel; and 11 per cent worked. It is probable that this work meant, in most cases, remunerative labor. The results are tabulated in the following table:

TABLE 28.—How do you spend your vacation?

Number of district.	Teachers reporting.	Home.	School and study.	Traveling and recreation.	Work.	Total number of ways reported by all teachers.
First.....	486	209	115	93	57	474
Second.....		62	48	25	9	144
Third.....		249	166	59	25	499
Fourth.....		246	164	69	35	514
Fifth.....		397	344	165	145	1,051
Sixth (east half).....	585	267	146	66	106	585
Total.....		1,430	983	477	377	3,267
Per cent.....		44	30	15	11	100

COMMERCIAL PURSUITS.

Relative to whether they engaged in commercial pursuits to add to their income, 2,702 teachers reported. This represented 82 per cent of all the teachers responding to the questionnaires. From the table given it seems that 16 per cent of the 2,702 teachers did engage in some remunerative pursuits to add to their incomes.

TABLE 29.—Teachers engaged in commercial pursuits.

Number of district.	Teachers reporting.	Number engaged.
First and second.....	405	84
Third.....	403	72
Fourth.....	520	65
Fifth.....	741	116
Sixth (east half).....	543	103
Total.....	2,702	442
Per cent.....	100	16

Two hundred and forty-five of the 442 teachers engaged in commercial pursuits stated the amount earned. Only those instances where the entire amount was given are indicated in the table. The column "not definitely stated" includes those who gave the amount per month or such indefinite answers as these: "Get rental from a farm"; "In business with my brother"; "Operate a farm." The amounts ranged all the way from \$15 to \$2,500. The median was \$86 +.

TABLE 30.—Amount earned in commercial pursuits.

Number of district.	Teachers reporting.	Amount earned definitely stated.							Not definitely stated.
		\$50 or less.	\$51-100.	\$101-150.	\$151-200.	\$201-250.	\$251-300.	Over \$300.	
First and second.....	37	12	8	2	.....	.....	.....	2	13
Third.....	39	16	19	2	2	.....	.....	.....	.....
Fourth.....	45	11	13	.....	.....	.....	1	1	19
Fifth.....	72	16	16	2	4	1	2	3	26
Sixth (east half).....	52	14	16	7	3	1	.....	3	8
Total.....	245	71	72	13	9	2	3	9	66
Per cent.....	100	29	29	5	4	1	1	4	27

Median, \$86+.

It was interesting to note what was done to earn this extra money. Some of the occupations were farming, truck gardening, poultry raising, stenographic work, clerking in a store, agency work, teaching music, and subletting rooms. One man earned \$500 in agency work. The man with \$2,500 income was a bachelor farmer, who taught school in the winter months. His salary for teaching was \$65. He was a university graduate, holding the degree of bachelor of arts.¹ That the teachers welcomed a chance to add to their teaching income was evidenced by such answers as these: "I would if I could"; "No opportunity"; "If possible."

PROFESSIONAL EXPENSES.

Eighty-five per cent of the teachers responding to the questionnaires estimated their professional expenses. This represented attendance at teachers' associations and institutes; and the amount paid for reading circle books and teachers' papers. The median amount paid was \$15.28.

TABLE 31.—*Professional expenses.*

Number of district.	Teachers reporting on professional expenses.	\$8 or less.	\$9-10.	\$11-12.	\$13-14.	\$15-16.	\$17-18.	\$19-20.	\$21-22.	\$23 and over.
First and second	485	129	98	19	3	82	3	42	5	104
Third	523	92	91	15	8	75	12	57	.....	173
Fourth	518	121	85	19	.....	100	.....	54	2	137
Fifth	782	191	159	30	7	109	18	99	8	182
Sixth (east half)	485	151	88	19	.....	79	.....	48	.....	100
Total	2,793	684	521	111	18	445	33	270	15	699
Per cent	100	24	19	4	.....	16	1	10	.....	25

Median, \$15.28.

SUMMARY.

The median yearly income based upon four districts was \$445.28. This represented 97 per cent of all the teachers responding for the four districts. The median number of months upon which income was received, based upon the same four districts, was 8.4 months. This was 96 per cent of the teachers responding for the four districts. "At home" represented 44 per cent of the ways vacation was spent, 30 per cent was spent in school and the rest in travel, recreation, and work. Of 2,702 teachers reporting on commercial pursuits to add to their income, 16 per cent replied in the affirmative. Less than half of this 16 per cent stated definitely the total amount earned. Eighty-six dollars represented the median amount earned for those reporting. A median of \$15.28 was found to be the amount paid out for professional expenses. This was based upon 2,793 replies.

¹ *Leifer*. Status of the Rural Teacher in the Fourth Congressional District. Page 246.

CHAPTER VII.

INDUSTRIAL AND SOCIAL CONDITIONS AND SUGGESTIONS OF TEACHERS.

The topics discussed in this chapter include the information derived from the list of questions grouped under the general head of "miscellaneous" in the questionnaire.

TEACHING OF HOME ECONOMICS AND MANUAL TRAINING.

The following statement of Mr. Lefler relative to the status of instruction in home economics and manual training, for the fourth district, is representative of the State as a whole:

The introduction of these phases of instruction into Nebraska rural schools can scarcely be said to be even in the experimental stage, if the status of the fourth congressional district is to be taken as an index.

Teachers are frank to admit that they can not handle manual training or domestic science because they are not especially prepared, and feel that their general knowledge is insufficient when applied to instruction needed to revitalize and enrich the rural school curriculum.

Three thousand and fifteen, or 98 per cent, of the teachers indicated whether or not they were teaching home economics and manual training. Table 32 shows that only 21 per cent were making any attempt to teach these subjects. The full force of this small percentage can best be comprehended when interpreted in the light of the next question, the object of which was to ascertain whether the introduction of these subjects was overburdening to the teacher. Table 32 indicates that 2,547 teachers responded to this question. This was 78 per cent of all the teachers returning the questionnaires. Seventy-one per cent of these teachers did find the additional subjects overburdening.

The following quotation from Mr. Crago's study is characteristic of the attitude of those teachers who felt the burdensomeness of these industrial subjects:

One teacher answers "Yes, indeed, I think most rural teachers are or would be satisfied were it not that they are overburdened, having 30 or more recitations to hear a day, from seven to eight grades; the sweeping, dusting, firing to do; a great many papers to correct; the lessons to plan for too many grades; going to a boarding place tired and finding no comforts there, children hanging about you; supper at 8.30 to 9; poor light, a kerosene lamp, a chilly room, destitute of any comforts whatever.

¹ Lefler. Status of the Rural Teacher in the Fourth Congressional District. Page 250.

Then this same teacher takes upon herself, besides all this, the work of training the boys in carpenter work, farming, etc., and the girls in sewing, cooking. Where will she find the time?"¹

The remarks from those who did not find the subjects burdensome seemed to indicate that these teachers possessed some training in the subjects as well as ability to organize them in such a way that they correlated with other subjects.

TABLE 32.—*Teaching of home economics and manual training.*

Number of district.	Do you teach home economics and manual training?			Is their introduction overburdening to the teacher?				
	Number reporting.	Yes.	No.	Number reporting.	Yes.	Remarks.	No.	Remarks.
First.....	412	99	313	353	254	With all grades...	99	If school is not too large.
Second.....	109	33	76	90	65	Except in combination.	25	If there is proper equipment.
Third.....	323	102	421	436	305	For 1 teacher.....	131	If teacher and pupils are interested.
Fourth.....	543	118	425	458	359	In 1-room building without texts.	99	A splendid incentive.
Fifth.....	850	190	660	724	529	When parents object.	195	Not the way I teach it.
Sixth (east).....	578	106	472	466	296	No time. Ridiculous. Yes! yes! Unless more help.	190	If teaching is prepared.
Total.....	3,015	648	2,367	2,547	1,808		739	
Per cent....	100	21	79	100	71		29	

WELFARE LEAGUES AND OTHER ORGANIZATIONS.

It is not possible to give the entire number of teachers responding to welfare leagues and other organizations for the reason that reports are not complete for all the districts. A combination of the reports from all the districts indicates that there were 157 community leagues, 852 districts without any organizations, and 1,053 different organizations reported outside of community leagues. It seems probable from an examination of the list of organizations discussed in the next paragraph that 60 organizations are all that could properly be placed under the general head of clubs for community activities. It is evident that some teachers did not understand what was meant by civic and welfare leagues. The significant thing in the study is that so many districts were without a community organization of any sort. Only 55 per cent of the teachers reported activity in existing organizations.

¹ Crago. Status of the Rural Teacher in the Third Congressional District. Page 144.

TABLE 33.—*Welfare leagues and community organizations.*

Number of districts.	Welfare leagues.		Other organizations.			
	Teachers reporting.	Civic and welfare leagues in community.	Teachers reporting.	None.	Organizations reported.	Teachers taking part in community organizations.
First and second		36			217	100
Third	508	37	430	225	199	57
Fourth	517	30	336	178	149	99
Fifth	803	41		191	346	209
Sixth (east half)	555	23	400	256	142	113
Total		157		852	1,053	578
Per cent					100	55

The 1,053 organizations were classified under general heads. Their distribution and number and percentage of teachers taking active part in them are given below.

TABLE 34.—*Teachers taking active part in organizations.*

Group.	Number.	Number teachers active in—	Per cent active in—
Religious organizations	458	330	72
Farmers' organization	321	41	13
Clubs for self-improvement	151	140	93
Clubs for community activities	60	58	97
Juvenile clubs	23	6	26
Fraternal organizations	14	2	14
Miscellaneous	26	1	4
Total	1,053	578	
Per cent	100	55	

It is refreshing to note that teachers' activities were noted in 97 per cent of the community clubs. The second highest percentage was in clubs for self-improvement. These included kensingtons, sewing clubs, music clubs, and culture clubs. A German club was reported in one district. The third highest group in which teachers were active was in churches and allied religious societies.

HOT LUNCHES AND SCHOOL GARDENS.

The responses on hot lunches and school gardens were excellent—approximately 96 per cent in each instance. From the accompanying table it is evident that school lunches were not a very tangible part of the school program, since only 8 per cent of the teachers served them. Nineteen per cent reported school gardens.

TABLE 35.—Hot lunches and school gardens.

Number of district.	Do you serve hot lunches?			Do you have a school garden?		
	Number reporting.	Yes.	No.	Number reporting.	Yes.	No.
First.....	423	41	382	418	121	297
Second.....	115	14	101	112	40	72
Third.....	539	46	493	539	113	426
Fourth.....	571	46	525	560	109	451
Fifth.....	890	86	804	882	146	736
Sixth (east half).....	624	28	596	624	73	551
Total.....	3,162	261	2,901	3,135	602	2,533
Per cent.....	100	8	92	100	19	81

SHOWING ATTEMPTS AT REVITALIZATION AND REDIRECTION OF THE COURSE OF STUDY

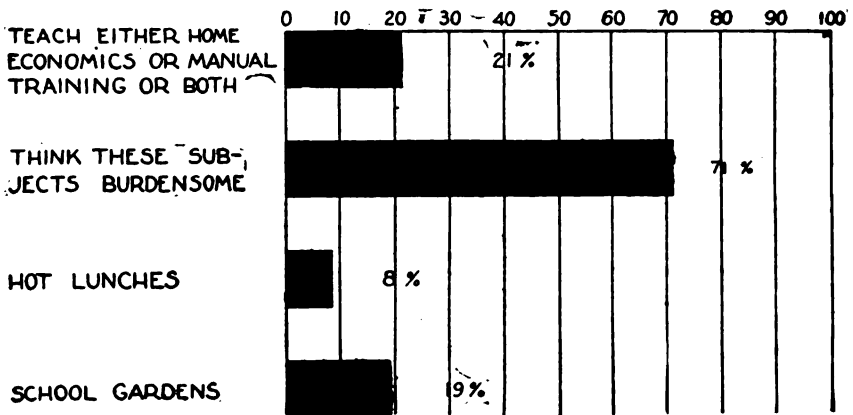


Fig. 8.

RESIDENCE IN COUNTRY AND CITY.

Ninety-two per cent of all the teachers responding to the questionnaires had lived from one to 60 years in the country; and 89 per cent had lived the same range of years in the city. Only 8 per cent stated they had never lived in the country. (Table 36.) The 11 per cent in Table 37 represents those who had spent all their lives in town. The statement is frequently made that the rural teacher is town bred. From the data given in Tables 36 and 37 it is evident that the Nebraska rural teachers of 1914-15 were not city bred. An examination of the tables indicates that these teachers had lived about an equal number of years in both city and country.

TABLE 36.—*Years lived in the country.*

Number of district.	Time definite.						Time indefinite.		
	Teachers reporting.	1-10 years.	11-20 years.	21-30 years.	31-40 years.	41-50 years and over.	All my life.	All, except when in high school.	None.
First and second.....	427	92	188	103	10				34
Third.....	519	110	116	6	1	2	185		99
Fourth.....	549	118	224	113	9	2			13
Fifth.....	745	138	357	223	19	8			
Sixth (east half).....	448	91	75	6		2	128	146	
Total.....	2,658	549	960	451	39	14	313	146	216
Per cent.....	100	20	36	17	1	1	12	5	8

TABLE 37.—*Years lived in town and city.*

Number of district.	Time definite.						Time indefinite.	
	Teachers reporting.	1-10 years.	11-20 years.	21-30 years.	31-40 years.	41-50 years and over.	All my life.	None.
First and second.....	367	116	173	62	4		12	
Third.....	521	128	102	5	1	1	99	185
Fourth.....	490	160	151	42	1			136
Fifth.....	524	235	226	55	6	2		
Sixth.....	307	84	84	9	1	1	128	
Total.....	2,209	723	736	173	13	4	239	321
Per cent.....	100	32	33	8			11	15

SOCIAL ACTIVITIES IN THE COUNTRY

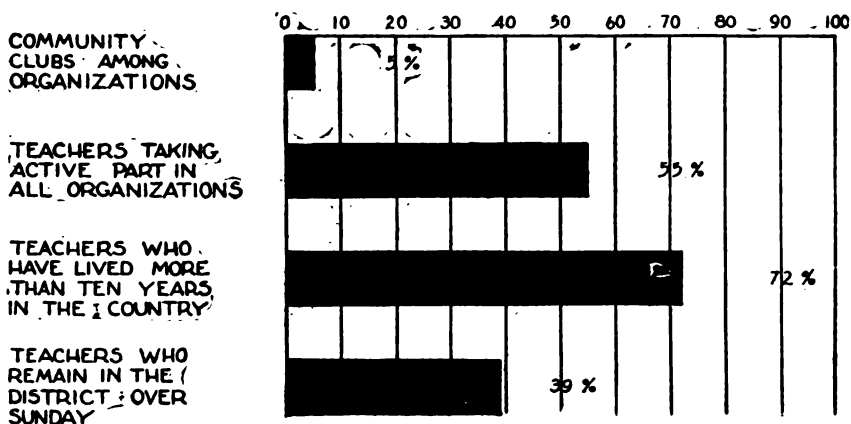


Fig. 9.

JANITOR SERVICE.

As to whether they did their own janitor work, 3,238 teachers, or 99 per cent reported; 3,123, or 95 per cent, reported upon extra pay for such services. Table 38 indicates that 94 per cent did their own janitor work and 3 per cent were paid for their services. On the next question: "If you hire it done, do you pay for it?" One thousand six hundred and sixty teachers reported. This number greatly exceeds the number who did their own janitor work. It is accounted for by the fact that the teachers interpreted the question to mean: "I would pay for it, if I hired it done." The significant thing is that 91 per cent of the teachers hiring janitors must pay for such service out of their own incomes.

TABLE 38.—*Janitor work.*

Number of district.	Do you do your own janitor work?			If so, are you paid extra?			If you hire it done, do you pay for it?		
	Teachers reporting.	Yes.	No.	Teachers reporting.	Yes.	No.	Teachers reporting.	Yes.	No.
First.....	431	412	19	417	9	406	283	265	18
Second.....	115	98	17	104	2	102	73	68	5
Third.....	549	535	14	538	9	530	186	100	29
Fourth.....	596	561	35	574	8	566	259	228	31
Fifth.....	924	854	70	877	42	835	358	316	42
Sixth (east half).....	623	594	29	613	21	592	501	478	23
Total.....	3,238	3,054	184	3,123	91	3,032	1,060	1,515	145
Per cent.....	100	94	6	100	3	97	100	91	9

Mr. Crago,¹ in his study for the third district, calls attention to the spirit of annoyance and discontent evidenced in these answers on janitor services.

Mr. Fosnot² made a study, in the fifth district, of the amounts paid for janitor work. He found them to vary from one to five dollars per month.

THE WEEK END.

Reports upon the question relative to the week end were received from 3,182 teachers, or 95 per cent of all the teachers responding to the questionnaires. Of this number 39 per cent remained in the district over Sunday, 36 per cent went home, and 25 per cent remained in the district part of the time. Some who answered "yes" said that they would like to go home, but railroads would not permit. Some who stayed in the district part of the time answered thus: "Only in coldest weather;" "In case of storm." From the returns not all of the 39 per cent, who stayed in the district over Sunday, did it by choice. There was enough in the data to substantiate the fact that these teachers were not an integral part of the social fabric of the community.

¹Crago. Status of the Rural Teacher in the Third Congressional District. Page 148.

²Fosnot. Status of the Rural Teacher in the Fifth Congressional District. Page 147.

TABLE 39.—*The week end.*

Number of district.	Do you remain in the district Saturday and Sunday?			
	Teachers reporting.	Yes.	No.	Some-times.
First.....	422	119	166	147
Second.....	114	28	46	40
Third.....	521	250	145	126
Fourth.....	593	203	232	158
Fifth.....	895	318	375	202
Sixth (east half).....	627	326	168	133
Total.....	3,182	1,244	1,132	806
Percent.....	100	39	36	25

SUGGESTIONS FOR BETTERMENT OF RURAL SCHOOLS.

No attempt was made to keep a record of the number of teachers offering suggestions for the betterment of rural schools. Some did not offer any suggestions, while others gave several suggestions. In all 3,312 suggestions were tabulated. These were classified under the following general heads:

TABLE 40.—*Suggestions for betterment of rural schools.*

Heads.	Number.	Per cent.
Consolidation.....	800	24
Better buildings and equipment.....	775	23
Better trained teachers.....	393	12
Better salaries.....	301	9
More cooperation.....	274	8
Improved course of study.....	195	6
Better living conditions.....	181	6
Janitor service.....	147	4
Better supervision.....	114	4
Miscellaneous.....	72	2
More social life.....	35	1
Longer terms.....	25	1
Total.....	3,312	100

Consolidation ranked first place among the suggestions; better buildings and equipment came second. Evidently these teachers were aware of their own lack of training, for the need of better trained teachers ranked third place. These suggestions are wholesome, affording a wealth of material worthy of an exhaustive study. Coming as they do from the teachers themselves they represent the ideas of those nearest the rural-school problem, for these teachers represent "the man behind the gun."

SUMMARY.

Twenty-one per cent of the teachers gave instruction in either home economics or manual training or both. The objections to teaching the subjects were: Already crowded programs; lack of room and equipment; and objections on the part of parents. Some thought

it possible to teach the subjects if teachers were prepared and the subjects were properly correlated. One hundred and fifty-seven community leagues were tabulated. However, an examination of the data indicated that many teachers failed to interpret just what community leagues meant, for only 60 of the organizations named could be properly termed community leagues. Fifty-five per cent of the teachers took an active part in the entire number of organizations reported. Although the number of community leagues was small, in comparison with the entire number of organizations, it is refreshing to note that teachers took an active part in 97 per cent of the community organizations. Eight per cent of the teachers served hot lunches; and 19 per cent reported school gardens. These teachers had lived about an equal number of years in town and country. Their own janitor work was done by 94 per cent of the teachers; 3 per cent were paid extra for their services; 91 per cent said that if they hired the janitor work done it would be necessary to pay for it themselves. Thirty-nine per cent of the teachers spent the week-end in the district, and 25 per cent stayed over occasionally. Many confessed that they would go home if they could. In the suggestions offered for the betterment of the rural school consolidation ranked first.

CHAPTER VIII.

A RECAPITULATION.

This study on the status of the rural teacher of Nebraska was made by a committee from the graduate school of education of the University of Nebraska. It is based upon the replies to a questionnaire sent by the committee to all the rural teachers of the State, except the west half of the sixth congressional district, during the school year of 1914-15. Replies were received from 3,278 rural teachers. This represented 62.4 per cent of the entire number of teachers to whom questionnaires were sent. Interpreting the study in terms of medians, averages, and highest percentages, the following may be said relative to the status of the rural teacher for the school year that the study was made:

The rural teacher was a young woman 21 years of age, who had lived approximately an equal number of years in both country and town. From the replies on nationality it was evident that her foreign lineage was near rather than remote. Her education was received in Nebraska and consisted of one summer beyond eight years of elementary and four years of high school training. She held a county second-grade certificate. The list of subjects that she had studied was comprehensive. She felt most proficient in arithmetic and liked to teach it best. She had no preparation for the industrial subjects, did not teach them, and believed that their introduction into the rural-school course was a burden to the already overcrowded program. She had no training in social service work. Her expectancy in the teaching profession was 1.85 terms. She hoped to become a grade teacher in town.

This teacher's yearly income was \$445.28. She paid \$114.80 for board, did her own janitor work, without extra pay, and spent her vacation at home or attending summer school. She would have been glad of an opportunity to add to her income through some commercial pursuit. Her institute expenses and teacher's periodicals amounted to \$15.28 per year. She lived in a family of two children. She occupied a room by herself, but it was not heated, and there were no bath conveniences. She did not spend the week end in the district unless forced to do so by weather or traveling conditions. She took some part in the organizations of the community. The organizations that appealed to her most were community and self-improvement clubs and religious societies. She believed that consolidation was the thing most needed for the betterment of rural-school conditions.

APPENDIX.

A copy of the questionnaire which was sent the teachers is given below:

THE STATUS OF THE RURAL TEACHER IN NEBRASKA.

In order that the results of this questionnaire may be of the greatest value to the State, you are asked to give the utmost care in answering the questions. Where there is not space enough for answers, use the back of the sheet. This survey is being conducted by a committee from the graduate school, department of education, University of Nebraska, consisting of Edith A. Lathrop, rural-school inspector, chairman; Superintendents A. Crago, of Central City; W. M. Simons, of Friend; E. M. Colbert, of Crawford; F. E. Weyer, of Atkinson; and R. T. Fosnot, teacher of mathematics, Hastings High School. Please send your answers to the member of the committee from your congressional district whose name is stamped upon the blanks.

.....County. Name.....
Age..... Nationality.....

Education.

1. (a) Number of actual months spent below the high school and where?
(b) In high school and where?
(c) If you have had work beyond the high school, where and how much?
(d) List of all the subjects you ever studied, including time and week hours (i. e., time in hours of recitations per week) given to each.
(e) Subjects in which you feel most proficient?
(f) Subjects you like to teach best?
(g) Have you had any actual experience in agriculture (nature and amount in each case)?
(h) Domestic science?
(i) Manual training?
(j) Social settlement work?
(k) What certificate do you hold?

Experience.

2. (a) Number of terms, including months' experience in teaching?
(b) As a rural teacher?
(c) As a village teacher?
(d) In town or city?
(e) If city teacher, what grade?
(f) Give dates of teaching, including districts?
(g) Is it your purpose to continue in teaching?
(h) If so, what line?

School census, attendance, and enumeration.

3. (a) What is the school census enumeration? Give number by ages thus:
Age 5, males, females; age 6, males, females; age 7, males, females; etc.
(b) Give number enrolled in school, including ages and sexes, thus: Age 5, males, females; age 6, males, females; age 7, males, females; etc.

School census, attendance, and enumeration—Continued.

3. (c) Account or give the reasons for the difference between those registered and enrolled?
- (d) Average daily attendance, including ages, thus: Age 5, males, females; age 6, males, females; age 7, males, females; etc.
- (e) How many defective children in your district: Males, females?
- (f) Blind: Males,, females?
- (g) Deaf: Males, females?
- (h) Feeble minded: Males, females?
- (i) How many of these are being cared for in State or private institutions: Males, females?

The boarding place.

4. (a) What does board and room cost you per year, on how many months in school?
- (b) Do you room by yourself?
- (c) Is it heated?
- (d) How many children in the home?
- (e) What facilities for bathing?

Income.

5. (a) What is your yearly salary on how many months of teaching?
- (b) How do you spend your vacation?
- (c) Do you engage in commercial pursuits to add to your income?
- (d) The amount of the latter?
- (e) What does it cost you to attend teachers' institutes and associations and buy reading circle books, etc.?

Miscellaneous.

6. (a) Do you teach home economics and manual training?
- (b) Is the introduction of these subjects in the rural school overburdening the teacher?
- (c) Is there an organized civic and welfare league in your community?
- (d) Name other helpful organizations in your community?
- (e) Do you take an active part in any of these? Which?
- (f) Do you serve hot lunches at noon?
- (g) Do you have a school garden?
- (h) How many years have you lived in the country?
- (i) In town or city?
- (j) Do you do your own janitor work? If so, are you paid extra?
- (k) If you hire it done, do you pay for it?
- (l) Do you remain in your district over Saturday and Sunday?
- (m) What suggestions would you offer for the betterment of the rural teacher?



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EDUCATION IN GERMANY

By
I. L. KANDEL

[Advance Sheets from the Biennial Survey of Education, 1916-1918]



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EDUCATION IN GERMANY.

By I. L. KANDEL.

CONTENTS.—General tendencies—Secondary education—Training of secondary school-teachers—Separation of church and State.

GENERAL TENDENCIES.

The development of education in Germany during the past two years must necessarily remain obscure until the sources of direct information are again opened up. From extracts and references here and there the educational situation does not appear to have been very happy, and, if reports such as the following may be trusted, the machinery so carefully built up seems to have failed at the crisis. Writing in the *Vossische Zeitung* of January 23, 1918, Dr. Paul Hildebrandt contrasts the early enthusiasm manifested by the German school children and their war activities with the situation at the beginning of the year (1918):

The sixth-grade pupils of 1914 are now about to be promoted to the upper third. They have become accustomed to the war. Who can wonder, then, that now in the fourth year of war our children exhibit signs of change? Too many of the restraints have been removed which should shape their developments; the loosening of family ties, the father at the front, the mother employed away from home, and in the lower ranks of society doing the work of men; the relaxation of school discipline. Of the teachers of the Berlin public schools, for instance, two thirds have gone into the army. The remainder are overworked. Dropping class periods, or combining classes together is the order of the day. In the higher schools half of the teachers are in the army. Furthermore, standards in the higher institutions of learning have gradually been lowered until the final examination has been pushed back fully two classes. All of these conditions have influenced our students and have weakened their persistence, since they see that they can attain a scholastic standing without effort that formerly demanded the severest application.

Young people follow the law of their nature. They are guided by the impressions of the moment and they can not permanently resist them. In addition, as time went on, especially in the case of students of higher institutions, and particularly in the towns, the hardship of inadequate nourishment appeared. It is the unanimous judgment of medical specialists that the children of the middle classes suffered most in this respect. General attention was attracted to the fact that the children were less sensitive to reproof, that they paid no more attention to threats, because the school authorities had directed that they should be treated with every leniency, and since promotions no longer represented any definite standard of accomplishment. This special consideration for the children was most obvious in the schools of the large cities. Was

not harvest work and the country vacation necessary to maintain the health of the coming generation, and was it not necessary for a great many to be set back in their studies so that they required repeated concessions to maintain their rank and thereby continually lower scholastic standards of their classes?

That spirit of voluntary service which at the beginning of the war revealed itself in its fairest aspect has now disappeared. Everywhere we hear lamentations over the increasing distaste shown for military services. Pupils collect articles now for the reward, not from patriotism, and the older pupils have their struggles. Shall they take advantage of the opportunity to leave school with a half-completed education, or shall they avoid placing themselves in a position where they will have to enlist for their country? What an unhappy indecision even for the best of them, those who really think about the matter.

Furthermore, in those ranks of society which are less influenced by tradition, discipline, and education, we find increasing violations of the law. At the first this manifested itself merely in an increase of theft. More recently it has taken a decided turn toward personal assaults. It is true, the latter are still negligible in proportion to the total number of juvenile offenses, but they are increasing every year. Already the number of violent crimes committed by youths in the city of Berlin is more than three times the number reported in 1914.

Thus, dark shadows are falling over the brilliant picture of 1914. Every disciplinary influence, every effort of the still fundamentally sound German nation must be exerted to oppose this tendency, and to lead the children back to the path of rectitude.

Another picture, but one also indicating the difficulties that attend the conduct of the schools, is given in the *Leipziger Volkszeitung* for February 8, 1918.

The Saxon minister of education recently drew attention in the Saxon Diet to the injurious effects produced by the war on the elementary schools of the Kingdom. In addition to the shortage of fuel, which last year frequently necessitated the closing of schools, and this year has required the removal and amalgamation of whole schools, the unsatisfactory health of the teachers has had an undesirable effect.

War conditions, according to the minister, have caused great emaciation and premature aging, and have diminished the capacity for work (alike physical and intellectual) and the sharpness of the senses. This state of things is attributed not only to the food supply situation, but also to the increased difficulty and extent of the professional work falling upon teachers (only 8,985 elementary school teachers were at work in Saxony on 1st of October, 1917, as compared with 14,800 before the war), and to the large amount of auxiliary service imposed upon teachers in connection with war economic measures.

These accounts hardly seem to be in keeping with the eulogies heaped on the German school system during the first two years of the war in the daily press, in professional magazines and by the Government. It was then felt very universally that the elementary school, the training ground of the discipline and physical strength and comprehensive culture that characterize the German soldier, had triumphed signally over the illiterate Russians and Italians, as well as the decadent French and the treacherous English. It was the elemen-

tary schools that produced the patriotic, loyal, thorough soldier whom the consciousness of a good cause carried to victory. This unguarded flattery of the elementary schools and their teachers helped somewhat to give a new impetus to a movement to which attention had been redirected just before the war. At an educational conference which met at Kiel in June, 1914, and was attended by representatives of all branches of education, it was urged with much enthusiasm that on the basis of a national common school higher education be made accessible to as many classes in society as possible so that intelligence might be recruited wherever it was found. Opportunity for ability could best be furnished through the establishment of the *Einheitsschule* or common school system. The program also included the unification of all branches of the teaching profession with the further implication of a uniform system of training for all and equal access for all to the highest positions in the educational profession. The elimination of social and sectarian distinction is another plank in the platform for educational reorganization.

The idea of the *Einheitsschule* has a long history in Germany; it has always been advocated by the leaders of progressive politics and thoughtful educators. When last agitated in the eighties, Prof. Rein and Mr. J. Tews, now the doyen of the elementary school teachers, were associated with the movement as they now are with its revival. The principle underlying the system of the *Einheitsschule* is that all children between the ages of 6 and 12 shall have a common educational foundation to be followed by educational opportunities thereafter suited to their abilities. This implies the elimination of the *Vorschule*, or special fee-paying school, which prepares pupils from the age of 6 until their entrance into the secondary school at about the age of 9 and which is a distinctly class school. The further implication of the *Einheitsschule* is the postponement of the beginning of secondary education to 12, a change that has much to commend it on grounds other than the provision of democratic opportunities, and is at least a better age at which a correct choice of a course and a career can be made than 9.¹

A new stimulus was given to the movement in the early days of the war, when politics was adjourned, when enthusiasm and victory had welded the Nation together as one, and when Hindenburg was claimed to be superior to Hannibal and the captain of the *Emden* to Leonidas. The commercial and industrial classes had, it was generally felt, proved themselves equal to the demands of the hour. The greatest inability to meet the situation had been shown by the politi-

¹ The present account is based on a study of the movement in the *Pädagogische Zeitung* between 1914-1916, when direct information ceased to be accessible. A valuable analysis of contemporary educational literature is contained in an article on *Les Projets de Réformes Scolaires en Allemagne*, in *Revue Pédagogique*, Vol. 69, pp. 250-267, September, 1910; and Vol. 70, pp. 408-517, May, 1917.

cal and diplomatic leaders who had enjoyed the traditional opportunities for higher education. The demand was at once renewed for the establishment of a common school from which pupils of promise in all classes of society might be recruited to place their intellectual abilities at the service of the state and to furnish an intellectual and spiritual reserve to make up for the physical and intellectual losses incurred during the war. It was no longer a question of providing an easy road (*Bahn leicht*) for ability but an open road (*Bahn frei*).

The war changed the aspects of the problem; the need of the hour was a German national school with opportunity for all to cooperate in promoting the great aims of the German cultural state. National unity could only be advanced by a national common school, which, according to the progressives, including the Deutsche Lehrerverein and the social democrats, must be established as a free, undenominational and nationally uniform institution placing gifted children of the poorer classes on the same footing for promotion to higher education as the children of the richer classes. Cultural and social equality must be established for the working classes who were anxious to play their proper part in the development of common national aims. They desired not so much to reach the top, but that their abler members should have opportunities opened to them suited to their ability without reference to school privileges and certificates.

For the member of the working classes the question is not so much, "How can I raise my son socially through education?" as "How can I secure for my class or rather its abler members appropriate influence in the administration of the state and of the community, in industry, commerce, transport, and how can I put an end to the influences of privilege that are socially detrimental?" Selection for educational advantages must in the future be based in the opinion of the advocates of the movement not on privilege but on the common right of all classes. The proposals for the *Einheitsschule* are well summarized in a resolution passed in June, 1918, by the Association of Prussian Women Teachers, meeting at Hannover:

National unity, returning stronger than ever after the war, will demand a unified school system for all Germany. The reconstruction of the whole system will have to be made with a single compulsory elementary school as its foundation. Reasons for this are of different kinds; reasons of social justice, that every gifted child shall be able to advance to a higher education; national and economical reasons, that the state shall be able to make use of all native talent in the most suitable place, and shall be able to economize in the heavy and useless expenses which are incurred by the presence of poorly endowed scholars in the secondary schools.

Karl Muthesius, long a leader in educational affairs, is opposed to class barriers and restrictions on intellectual development merely

because of poverty. [The elementary school up to 12 must be the national school offering a common foundation for all; beyond this opportunities must be created for differentiation according to the needs of the individual and of the nation.] The common school must be free from clerical control and permitted to be self-directing. He expresses his opposition to the classical tradition in days when German culture is fully developed to furnish a sound basis for education. Prof. Rein, in a work by Fr. Thimme,¹ in which are collected the opinions of leading Germans on the subject under discussion, declares himself most emphatically, as might be expected, in favor of the common school, whose establishment would make a real and effectual contribution to the development of national feeling in the hearts of all children. Such an organization would give inner unity to the whole system of moral culture in Germany.

Dr. Kerschensteiner² approaches the whole question of reform from a broader standpoint than any other of its advocates. He not only questions the existing basis and aims of education, but seeks to bring the reform into line with the modern needs of society. The acquisition of knowledge is a secondary and subordinate end; the school's essential task is to make men capable of devotion to the cause of society and of humanity. Character, moral courage, energy, and sense of civic duty are qualities that are more vital than mere information. Contrary to prevailing thought among his countrymen he opposes the theory that the state is a separate entity existing apart from the individuals composing it. He accepts the Roman and Anglo-Saxon view that the state is an association of individuals organized to promote and protect the interests of all. In such a state the free and willing collaboration of citizens should mean the elimination of restraint and coercion.

— The educational implication, according to Kerschensteiner, is that "it is essential that the school should cease to be the playground of individual ambitions and egoisms, in order that it may become the home of social devotion." The aim should not be intellectual culture or knowledge for its own sake but training for human intercourse and just action. The sense of civic duty can only be called forth in a state that furnishes scope for the development of personality. "If we wish to realize the true civic spirit, we must subdue the narrow national spirit." The school must accordingly fulfil a twofold duty—it must take account of individual differences and at the same time keep in the foreground the universal element—practical conduct. Educational reform must start from these premises.

¹ Thimme, Fr. *Vom inneren Frieden des deutschen Volkes*. Leipzig, 1916.

² *Deutsche Schulerziehung in Krieg und Frieden*. Berlin, 1916. Kandel, Jessie D. *Liberal Tendencies in German Education*. *Educational Review*, vol. 57, May, 1919. Pp. 399 ff.

The state, says Kerschensteiner, must guarantee the right of every child to an education suited to his ability. He combats all the arguments of opponents of this movement—overcrowding of secondary schools, difficulty of selection, lowering of standards, increase of the intellectual proletariat, and the danger of social conflicts. The *Einheitsschule* should, therefore, be an educational institution for all up to the age of 22 or 24, with selection all along the line according to individual differences. Unlike Rein, Kerschensteiner does not desire to keep all children together as long as possible but would begin to differentiate as soon as individual bent appears. For such a system flexibility and elasticity are indispensable; bureaucratic control and uniformity are dangerous. Selection might begin at as early an age as nine, when those who show intellectual aptitude may be transferred to secondary schools. For those who remain in the elementary school variety may be afforded by a departmental system. There should be transfers back and forth between schools and departments to give the individual every opportunity for realizing himself.

But whether a child remains in an elementary school or goes on to a secondary or vocational school, the fundamental task of education continues to be the preparation of citizens; the civic spirit must saturate the whole of education; not the emphasis on nationalism or on German language and literature, but the sovereign idea of preparation of all for society, can successfully promote the desired end. Education is a State function, and since the State has claims superior to those of smaller groups and societies, it should have the right to arbitrate and decide between conflicting interests, without, however, ignoring particular characteristics. Centralization that is too strict will stifle local effort and individual initiative; competition and rivalry are essential to life and progress.

Opposition to these claims was immediately aroused and came from the secondary schools, teachers of traditional subjects, school inspectors, administrative officials, and the clerical and conservative elements in politics. The secondary-school teachers in general feared overcrowding of their schools. The specialists were alarmed at the thought of the postponement of the beginning of secondary education from the age of 9 to 12 and the consequent lowering of standards. The inspectors and administrative official produced arguments against a radical change based on considerations of the good of the lower classes; higher education would only lead to unrest and discontent, to dissatisfaction with the social position of parents, and ambitions for higher positions that are limited in number; pupils from poorer homes and humbler environments do not enjoy the same advantages and opportunities that are possessed by the children of the upper classes—a condition that in itself might be fraught with danger consequent on the sudden transfer from a humble to a higher status.

In any case the work of the elementary schools furnishes no criterion for the selection of pupils for advancement to higher education, so that early selection would be surrounded with risk for the aspiring pupil, while no account would be taken of or provision made for late development. It would also be unjust to the elementary school teachers to deprive them of the pick of their product and the promotion of gifted pupils would mean the withdrawal of an ever-present incentive to the less well endowed. If the views of the radicals were realized and the selection of able pupils for advancement to secondary schools were made by the schools, the rights of parents would be outraged; at the most all that the schools should do would be to advise parents and allow them to act if they choose. The fear was also expressed by no less an authority than Rudolf Eucken that the realization of the common-school proposal would endanger traditional values in school, lower standards, compromise the precious things of German culture, and in the last analysis lead to the establishment of private schools and the perpetuation of a social class to preserve these heritages. Curt Fritzsche,¹ in a work on the *Einheitsschule*, claims to see the purport of the whole movement in the reception accorded at the Kiel congress of 1914 to the declaration of two French delegates that it represented the international ideal common to all Europe—clearly the aims of the movement are internationalism, democratization, radicalism, antireligious secularization, egoism, and social feuds.

Finally, Ferdinand J. Schmidt, professor of education at the University of Berlin, attacks the movement in an article in *Preussische Jahrbücher*, October, 1916. He charges the reformers with basing their agitation on political prejudices and class interests. The proposal to establish an extended unified school system, with six years of elementary education, three years of intermediate and three of secondary, without distinction for all would lower the standard to meet the needs of the poorest intellect; it would tend to a reduction of the elementary school subjects, and, by consequence, would lower the standards of the secondary schools. Foreign languages would be begun too late, and the boy going out into the world at the age of 15 would have studied French or English for only one year; ultimately languages would disappear entirely from the intermediate stage and with them the most effectual instrument for broadening the mind would be gone. The reformers are the dupes of a pedagogic materialism which would be disastrous to the nation in diverting the aim of education from its true goal—moral culture. Emphasis would then only be placed on developing those qualities and those abilities that would yield most profit.

¹ Fritzsche, C. *Die Einheitsschule in Bibliothek für Volks- und Weltwirtschaft*, No. 21, Dresden, 1916.

This is the American method in education with all its dangers. The reform would not result in social equality; class distinctions continue even in countries that have a unified school system open to all. By boundlessly developing the understanding, which divides and separates, by releasing, without check or hindrance, the intellectual abilities of individuals, by freeing them from that wholesome and indispensable discipline of social morality, they are bringing about, with the best intentions in the world, the overthrow and dismemberment of national unity.

Early in 1916 the subject came within the realm of practical politics when the educational estimates for 1916-17 were brought up for debate in the Prussian House of Representatives (*Abgeordnetenhaus*). The Social Democrats and the Progressive Volkspartei came forward with a demand for the abolition of the *Vorschule* and the throwing open of opportunities for ability in whatever grade of society it might appear. The *Vorschule* is merely a school for those privileged by class, who made no other use of their educational opportunity than to advance as far as the *Einjährigenzeugnis*. If the principle of the *Einheitsschule* were adopted the best pupils would pass on completion of their elementary school course to the secondary school and in five or six years obtain the *Reifezeugnis* or certificate of maturity that would admit them to the universities. Both proposals met with opposition from the conservatives and the clericals who feared that the common-school movement would involve secularization. They were prepared to grant one concession that the transfer of pupils from the elementary to the secondary schools should be made as easy as that from the *Vorschule*. On behalf of the Government the minister of education admitted the need of establishing facilities for transferring able pupils from the elementary to the secondary schools and suggested the organization of a *Mittelschule* for this purpose. He referred to an experiment that had already been conducted in Berlin whereby pupils from elementary schools were transferred to the *Quarta* class or third year of the *Realschule* and in four years attained to the *Einjährigenzeugnis*. Such pupils could then move on to the *Oberrealschule* and at 19 or 20 be ready to pass on to the universities.

In the course of 1916 announcements appeared in the press that the ministry of education was preparing regulations to enable fit and selected pupils, after three years in an elementary school, to be transferred without further examination to a secondary school, thus enjoying practically the same privilege as the pupils of the *Vorschule*, with the difference that, if found deficient, they could be returned to the elementary grades. This proposal met with a storm of opposition; it was feared that the secondary schools would be invaded and that the teachers and principals of these schools would not have the power to turn pupils back to the elementary schools. The result was

that the ministry denied that it was even considering such a suggestion, and stated that it was merely planning to codify the regulations for the entrance examinations to secondary schools which had remained unchanged since 1837. When the new regulations were issued in August, it was found that they benefitted the *Vorschule* rather than the elementary schools.

The question of the *Einheitsschule* again came up in the course of the debate on the estimates for 1917-18 and the Government was then compelled to act. The position of the minister of education showed clearly that the ground had been shifted. From the consideration of the *Einheitsschule* and of plans for facilitating the transition from the elementary to the secondary school, the problem had been narrowed down to that of selecting gifted elementary school pupils for advancement to higher education. The minister announced that he had early in 1917 addressed the following questions to all district inspectors:

(a) In what elementary school organizations can a good pupil pass into *sexta* of a secondary school without necessitating special arrangements or alterations in the school program?

(b) If such organizations do not exist, what changes would have to be made in the program to render these transfers possible?

(c) Can such changes be made without disadvantage to the other students? If not, suggestions should be made for special arrangements to meet the needs of the gifted pupil.

It was announced that an experiment was being conducted by the Government at Königsberg and plans were in progress for dealing with the needs of gifted children in Berlin, Frankfort, Breslau, Mannheim, and Hamburg.

The new movement for the selection of gifted and exceptional children seems to have had the effect of checking completely any further demands for the *Einheitsschule*. In the schools systems to which reference is made above *Begabten* schools have been or are in process of being established, and it is not improbable that this compromise will be accepted by both sides. Nowhere has a common school been put into operation, and teachers' associations appear to have been active in promoting the new experiments, which are limited to facilitating access to middle and secondary schools to gifted and exceptional (*Begabten* and *Hochbegabten* pupils) in elementary schools.

In Berlin such an experiment was introduced on the suggestion of Geheimer Justizrat Cassel, a member of the Progressive Volkspartei, who urged, in the Prussian Abgeordnetenhaus, in 1916, the establishment of facilities in each province to enable pupils on finishing the elementary schools to continue to a higher school and reach the *Reifezeugnis* or maturity certificate in five or six years. Such a plan, he stated, would be of advantage to children of poor parents in larger

cities as well as to children in small towns and rural areas who could enjoy the blessings of home influences up to 14. Dr. Reiman, the director of education for Berlin, adopted the suggestion and the Begabenschule was established in 1917 for the admission of exceptional and studious pupils who have completed the first seven years of the elementary school course. The work of the Begabenschule begins with that of Untertertia of a secondary school; during the first year the pupils are under probation and, if they fail to meet the standards, may be discharged, that is, at the age at which they would ordinarily have reached the close of the compulsory attendance period. After two years, that is after Untersekunda, a choice is open between the course of a gymnasium or of a realgymnasium. The schools do not grant the privilege of one year military service, but after six years lead to the maturity certificate which admits to the university. The Begabenschule is open to able pupils of all classes; fees are remitted for poor pupils, and books and, in case of need, maintenance grants up to 300M (\$75) a year are granted. The pupils must be recommended by their schools and are selected on the basis of psychological intelligence tests. The first tests were conducted by W. Moede and C. Piorkowski, psychologists who had met with success in selecting motor transport drivers for the army by tests which were used in all sections of this branch of the service. This selection is based on tests of attention and concentration, memory, combinations, wealth of ideas, judgment, attention, and observation. The authors of these tests declare that "reviewing the precise results of the analytical and systematic tests, the professional psychologist can not refuse to accept the responsibility for his decisions based on good scientific principles." Dr. Reimann plans to test pupils with artistic or technical bent and select them at 13 or 14 for higher trade schools to train as painters, jewelers, designers, embroiderers, cabinetmakers, lithographers, and other crafts. Dr. Rebhuhn has prepared an observation sheet which was presented by the Association for Exact Pedagogy to the city school board to be used by teachers as soon as pupils commence to show marked ability and to serve as a record from the second year up.

A similar plan was inaugurated at Leipzig for boys, and provision will be made for girls. Special classes were established at a Reform School and an Oberrealschule, closely coordinated with the elementary schools. The course begins in Untertertia with intensive study of French for three quarters of a year, when English or Latin is taken up. After another year the pupils are ready to take their place in the normal class of the school (Untersekunda). Tuition, books, and maintenance allowances are granted in case of need. Since the number of selected pupils is restricted to 20 each year, they are the very exceptional only (*hervorragend Begabten*). In order not to flood the academic and professional careers similar experiments will

be attempted in other schools, e. g., school of commerce, technical school, and trade schools.

A somewhat different plan has been adopted at Hamburg, where it was originally intended to establish a transition or special class to coordinate the elementary secondary schools. In place of this, owing to the insistence of the teachers and the House of Burgesses, a new type of school is organized that avoids such half measures. At 10 years of age; that is, on completing the fourth school year, pupils are specially selected for the new schools, of which 22 have been established (14 for boys and 8 for girls), to provide either a four-year German course or a five-year course with foreign languages. These schools are similar to the Prussian middle schools and carry the privilege of admission to certain higher trade schools and to the State examination for the one-year military privilege. The pupil who completes the course of such schools can by way of the Oberrealschule or the Realgymnasium pass on to the universities.

The selection of the gifted pupils is based partly on the psychological observations by the teachers and psychological tests by an expert, for both of which Dr. W. Stern, of the Psychological Institute, is responsible. The psychological observations are recorded in a specially prepared folder indicating the home conditions and school record of the pupil, his adaptability, attentiveness, susceptibility to fatigue, powers of observation and comprehension, memory, imagination, thought, language, industry, disposition and will power, special interests, and abilities. The psychological tests include the logical arrangements of ideas, explanation of concepts, completion test, building of sentence on the basis of keywords, the derivation of the moral of a story, the discovery of logical absurdities, the finding of a legend for a series of pictures, and test of attentiveness. Stern claims that the cooperation of the teachers makes the Hamburg system superior to the Berlin plan of selecting on the basis of tests alone; it should also be mentioned that the selection in Hamburg is under the supervision of a committee of the superintendent, inspectors, principals, teachers, and psychologists. For pupils who develop at a later stage than those for whom these arrangements are made transition classes have been established in two Realschulen in which after one year they can pass on to the last year of the school and qualify for the one-year military privilege.

Breslau has established special classes for boys and girls of great ability (*Hochbegabten*) selected at about the age of 12 by a psychological expert on the basis of intelligence tests similar to those used in Hamburg. Pupils who succeed in these schools will be encouraged by the city to proceed along suitable lines. The city will look after the education of selected pupils, who could thus be under the observa-

tion of the psychologist until they pass into their chosen vocation. Facilities have been instituted in Charlottenburg to enable gifted pupils to advance more rapidly in the elementary schools and complete the work of a middle school. At Frankfort gifted pupils, on leaving the elementary schools, may be prepared in one year to enter Untersekunda of an Oberrealschule, and in four years to attain the *Reifezeugnis*. The Mannheim system is already well known in this country.¹

The experiment is thus confined to the larger towns, and complaints are already heard that the state should take over the further development of such plans to bring them within the reach of all. In the meantime critics even of this precipitate of the more ambitious and more democratic movement for the *Einheitsschule* are not wanting. There are those who express concern lest the gifted pupils become spoilt and conceited; that selection in itself would set up class distinctions; that school ability is not necessarily a guarantee of ability in after life; that pupils should not be selected on the basis of school marks, but on the basis of character, pronounced bent, and moral force. Further, the plans involve the danger of robbing the lower classes of their intelligent members, of depriving industry of its abler workmen, and of overcrowding academic and professional careers. Finally, *faute de mieux*, psychological tests are not yet sufficiently developed to serve as a basis of sound and scientific diagnosis, and are inadequate until they have found a more extensive place in the schools. It is clear that the mind of the German reactionary follows the same kind of logic in domestic as in foreign affairs

SECONDARY EDUCATION.²

The movement for the common school, in some of its aspects, involved the reconstruction of the secondary school or at least the organization of a new type based entirely on a purely nationalistic foundation and open to all without distinction. This agitation was reenforced from another direction. The successes at the front were felt to be due to the excellent technical preparation given in some schools and the continued collaboration of the leaders in the field of the applied sciences. At the same time the megalomania of the early period manifested itself not merely in a feeling of physical superiority but in a sense of moral and intellectual self-sufficiency that needed no reenforcement from external sources. There was still a third point from which the traditional curricula were sub-

¹ See Auxiliary Schools of Germany. United States Bureau of Education, Bulletin, 1907, No. 3.

² See especially Friedel, V. H. *The German School as a War Nursery*. London, 1918. This is a translation of a French work carefully analysing German thought on education as it appeared in the daily press.

jected to criticism—their failure to give a real preparation for the needs of modern life. The classical gymnasium in particular was attacked as an anachronism to be swept away as soon as possible and to be replaced by a genuine German nationalistic school adapted to the needs of to-day. To devote time to subjects that do not “function” or pay is a gross mistake. The schools should teach things and not words, realities and not tradition. Business men, practical politicians, and nationalistic educators found themselves united in a campaign to secure a school that would bring up German citizens in a pure German way and that would make the German civic spirit the core of the curriculum.

The charge is made that the so-called reforms resulting from the Emperor's conferences in 1890 and 1900 did not result in a modification of the gymnasium, where Latin and Greek still form the core of the curriculum with an emphasis on the grammatical and philological elements. The pseudo-humanistic ideal of teaching nothing that is directly useful for life still animates such schools, which continue as ever to be the homes of conservatism. “*Deutschtum*,” German *Kultur*, must be the center around which secondary school studies should revolve. The classics may have been the roots of German *Kultur*, but Germany now possesses the fruit and flower in her own culture and that alone. So far as antiquities are concerned, a knowledge of them can in these days be readily obtained through photographs, reproductions and models, and translations without the waste of time involved in studying grammar and rules. As for the disciplinary value of such studies, much better results can be obtained from mathematics.

The same attitude was manifested on the question of the study of modern foreign languages, although the material loss that might be involved in their total abandonment made the discussion of the subject a little more wary. It was argued that, since the enemy had evidently not taken the trouble to understand Germany, it was waste of time for Germans to attempt to study their languages. Statistically it was proved that next to the English language German was the vernacular of the world and after the war English would inevitably be ousted. It was even proposed, and a motion to this effect in the Prussian Upper House met with the support of all the university representatives, that the languages of Germany's eastern allies should be introduced into the schools. Flemish was added to the list subsequently. The more cautious were not so ready to see English and French ousted, and, while admitting that Germany could gain nothing culturally from the enemy languages, suggested that commercially it might still be found profitable to retain English and add Russian and Spanish as the languages necessary for Germany's future commercial development. The one aim of the schools to-day

should not be formal training but an education for life founded in moral idealism; there must be, as the Emperor had urged in 1890 and 1900, "a more decided nationalization of secondary education" to develop citizens of a German state.

The blatancy of these claims was not allowed to pass unchallenged. The advocates of the classics protested strongly. Did the opponents wish to make Americans of the youth of the country "to dry up their dreams, and to turn boys of 15 into makers of machinery, into dentists, or into surgeons"? The German moral and intellectual forces of which all were proud were founded, it was claimed, on the ancient cultures. The particular character of German culture was derived from the cult of the classics. One secondary schoolmaster sums up the arguments of the classicists in the statement that "Three persons have become one in us, the Greek, the Christian, and the German"—hence each must have its place in the development of youth. Nor were there lacking students of modern foreign languages to insist on their retention, but even here it was suggested that such languages and literatures be studied only in so far as they can contribute toward a clearer comprehension of German national culture. The attitude of the ministry of education on this subject is indicated in an instruction of March 20, 1915, which permitted the employment in secondary schools of Germans expelled from France and England to teach the languages of those countries, even if they did not possess the prescribed qualifications or previous teaching experience.

It is obvious that no matter what the opinion on any subject might be, all who entered into the discussion of educational values were unanimous in accepting the nationalistic aim. This aim was stimulated by the Government in various ways, direct and indirect. Teachers were urged immediately on the outbreak of the war to turn the attention of their students to the study of the war events and patriotic endeavor. The ministry of war with the support of the ministry of education and other ministries interested in education urged the organization in schools and elsewhere of battalions and companies of boys of 15 or 16 (*Jugendcompagnien*, *Jungmannen*, *Jungmannschaften*) for physical training and instruction as a preparation for military training. Militarism in these organizations was at first disavowed, but it began progressively to enter and by 1917 no secret was made of their primary purpose.¹

The direct method for the inculcation of patriotism, national pride, and devotion to the dynasty was adopted by the ministry of education when on September 2, 1915, it issued its "New Organization of the History Syllabus in Higher Schools of Prussia." It appeared that the history syllabus for the secondary schools had

¹ See Friedel, *op. cit.*, Chap. II.

grown too cumbersome, so that it was impossible to handle it satisfactorily in the present overcrowded condition of the curriculum. "Since it is just the period from 1861 to the present that for us Prussians and Germans surpasses in importance everything else that has happened in the history of the world, the earlier periods must be treated much more briefly and comprehensively, so that the history of the past 50 years can be dealt with in detail." Under existing arrangements the modern period is not taken up until Untersekunda. The new regulations require Prussian-German history to be begun in Sexta and continued concentrically so that pupils will acquire a mastery of national history. The emphasis throughout it is urged should be on the outstanding character of the Hohenzollerns, more especially from the time of the Great Elector down to the present. Ancient and medieval history are retained but teachers are advised to dwell only on those movements whose influence has been more or less continuous. Briefly analyzed the suggested syllabus is as follows:

Sexta—Stories from recent history. Quinta—Outline of Prussian-German history. Quarta—Ancient and medieval history to about 476 A. D. Untertertia—History of Germany in Middle Ages to the middle of the seventeenth century. Obertertia—Amplifications of the outline given in Quinta at least to 1870 or even the present day. Untersekunda—Review ancient history, begin Germany history, if not already begun in the previous class, and deal in detail with selected parts since 1870. Obersekunda—Close the ancient period and go on to the thirteenth century. Unterprima—German history up to Frederick the Great. Prima—German history from 1786 to the present.

Some flexibility was permitted to the teachers in the organization of the work. The experiment was to be inaugurated at Easter, 1916. By a prophetic anticipation the reports on this experiment in molding patriots to Hohenzollern standard were to be made in October, 1918.

TRAINING OF SECONDARY-SCHOOL TEACHERS.

The system of training of teachers for secondary schools has been somewhat modified by new regulations issued in June, 1917. The rules for the admission of candidates remain unchanged. At the close of the necessary period of university study of four years candidates are required to undergo a general examination (*Wissenschaftliche Prüfung*). This examination is conducted by a special board (*Wissenschaftliches Prüfungsamt*), which includes university instructors and schoolmen. The paper in general knowledge is abolished, but every candidate is examined in philosophy with special reference to education, including psychology, logic, and ethics related in particular to child life. Familiarity must be shown with

the works of the leading writers in the special branch of philosophy bearing on education and with its place in the history of philosophy. This general examination is followed by examinations in the special fields selected by the candidate from the following subjects: Christian theology, German, Latin, Greek, Hebrew (only as a minor), French, English, history, geography, mathematics, physics, chemistry, botany, and zoology. Of these subjects two, instead of one as hitherto, must be taken as majors and one as a minor. An innovation is the addition of a large number of supplementary subjects that may be substituted for the minor. These include philosophical propædæutics, pedagogy, applied mathematics, mineralogy and geology, classical archaeology, history of art in the Middle Ages and modern times, comparative languages, Polish, Danish, Russian, Spanish, Italian, Turkish, drawing, singing, and gymnastics.

Candidates who pass the requirements in this qualifying examination must undergo two years of practical training. Six to eight probationers are sent to a selected school for one year at a time, so that at the end of the period each candidate becomes thoroughly familiar with two schools. During each of the two years regular sessions must be conducted for the study of education by the director of the school to which candidates are assigned. At least two hours a week must be given to history of education, principles of teaching, psychology, and ethics. The probationary period of two years is closed by a second examination, the pedagogical examination (*Pädagogische Prüfung*), conducted by a pedagogical examination board (*Pädagogisches Prüfungsamt*), which consists of a provincial school councillor, the director, and faculty of the schools in which the candidates have been trained. The subjects of the professional examination include the history of education and principles of teaching.

It is claimed that the new regulations represent an advance in separating the professional from the general examination. The regulations are based on the view that a true insight can best be obtained into the problems, principles, and philosophy of education during the two years of practice. It is objected, however, that an intellectual appreciation of the problems involved could be better imparted in university courses, and the theory can then be subjected to the criticism of practice. The regulations, since they do not require attendance at lectures on education at the university as they do in the case of general subjects, depreciate the place of education as a science and deal a blow at the development of the subject in the universities. The new system, which came into force on April 1, 1918, involves the danger of reducing education and teaching to the level of a handicraft. It is suggested by critics that candidates should as a condition of admission to the examination be required to

have attended courses and seminars in education at the universities and psychological institutes, that psychology take the place of philosophy in the general examination, and that in the professional examination questions be given in the oral test on the organization, history, and psychology of at least one school subject, on moral instruction, and on psychological tests and measurements.

THE NEW SPIRIT IN SCHOOLS.

The tendencies that are already apparent since the overthrow of the monarchical government in Prussia are indicated in a number of decrees and circulars that have been issued by the new minister of education. Thus the *Kölnische Volkszeitung* of November 16, 1918, printed the following decree:

1. Wherever the teaching of history and other subjects have been used to arouse national hatred it must be discontinued in the future; it must be replaced by an adequate presentation of subjects dealing with natural history. All biased and false teachings about the war and its causes are to be avoided.

2. All books which glorify the war are to be removed from the school libraries.

3. At no time should the teachers pass adverse or false remarks about the causes and consequences of the revolution or the present Government which are apt to debase in the eyes of the school youth the achievements of the revolution.

4. School authorities and teachers must avoid in their intercourse with the school youth any matter that tends to arouse a counter-revolution (especially in the Lowlands), as such action is at the present moment greatly endangered by the possibility of a civil war.

5. Pending the decree about the separation of state and church, the children of dissidents and persons holding religious views for whom no provision has been made in the present curriculum must be excused from the lessons in religion without any further proof, on the request of persons responsible for their education.

This was followed at the close of November by the Socialist program of education issued by the Socialist Kultus-Minister, Herr Konrad Hänisch, of which a translation appeared in the *Times* (London) Educational Supplement, December 19, 1918:

A. GENERAL.

1. The separation of church and state has been settled in principle.
2. Religion has ceased to be an examination subject, and the introduction of unsectarian moral teaching is being prepared.
3. Supervision of schools by the local clergy and participation of the clergy in the district inspections are abolished.
4. Mixed education of boys and girls has already been introduced in some schools.
5. Teachers and scholars receive powers of self-government.
6. All chauvinism is banished from the instruction, and especially from the instruction in history.
7. Prussia will propose the assembly of a school conference for the whole Empire.
8. The uniform school (*Einheitsschule*) is secured, and the abolition of all class schools will be begun immediately.
9. The office of rector will be deprived of its autocratic character and built up upon a collegiate basis.
10. The school authorities are instructed to promote among

teachers' unions and at official conferences discussions of educational and cultural questions of policy in the spirit of the new age. 11. The ministry of education will include as representatives of the Socialist Party two ministers, one undersecretary, one principal adviser, and two assistant advisers. 12. Touch will be kept with champions of the new movement throughout the whole country, and a list will be made of suitable candidates for freshening the body of officials and teachers. 13. The leaving examination from the secondary schools will be transformed and the number of examinations will be reduced. 14. The Prussian ministry of education claims a share of the confiscated royal castles for the purposes of national education—as training schools, boarding schools, model seminaries, museums, and national high schools. 15. Physical culture has been deprived of its military character.

B. TEACHERS.

16. No teacher may in future be compelled to give religious education. 17. It has been proposed to the ministry of war that all teachers shall be released immediately from their military obligations. 18. Work for the willing! Immediate provision of employment for teachers who return from the field by reducing the size of classes, filling of all vacant posts, and establishment of special courses. 19. The amnesty will be applied to all teachers who have received disciplinary punishment. 20. Teachers who have been punished for their political or religious convictions are to be reinstated. 21. The teachers will have representatives in the Government and in the school administration. The socialist teacher Menzel has been appointed principal adviser in the ministry of education. 22. Tried teachers will be appointed to local inspectorships of schools without special examinations.

C. UNIVERSITIES.

23. Prominent representatives of scientific socialism and of other tendencies which have hitherto been systematically excluded are to be appointed to university chairs. 24. A system of national high schools is to be built up on large lines and to be placed in organic connection with existing schools and high schools. 25. The reorganization of the technical high schools will be effected in close connection with the universities. 26. The social, legal, and financial position of the assistant teachers in universities (*privatdozenten*) is to be raised. 27. Freedom of doctrine in the universities is to be rid of its last fetters. 28. Professorial chairs and research institutes for sociology will be established.

D. GENERAL CULTURE.

29. The theaters will be put under the ministry of education. The theater censorship has been abolished. 30. Opportunity for work, and relief where necessary, will be given to unemployed artists and writers on their return from the field. 31. The system of appointments will be reformed in association with the organizations of artists of every school. 32. The royal theaters will become national theaters, and the court orchestras will become national orchestras.

SEPARATION OF CHURCH AND STATE.

The appearance of this program created considerable alarm throughout the country among those who feared not only separation of the church and school but the elimination of religious instruction. In response to numerous telegraphic and letter inquiries Herr Konrad

Hänisch addressed to the *Rheinische Zeitung* in Cologne the following telegram:

Repudiate most vigorously the baseless rumors that the Kultus ministry intends immediately and by a mere decree to bring about unawares and with a single stroke the separation of church and state. The carrying out of this program is, to be sure, in line with our policy, and the initial steps are already in the course of preparation. But it is to be understood, and the members of the ministry are unanimous, that representatives of the church will also be invited to the preliminary work which involves financial, judicial, and, in general, political questions. Preliminary discussions with representative clergymen and instructors of canonical law have already been initiated. Efforts have been made to guarantee the interests and spare the feelings of the church circles in Prussia. No one will be slurred. Irrespective of all other considerations, such action would be in opposition to the general political situation. The Prussian ministry of education conducts no narrow provincial, but state politics. There is no reason for apprehension on the part of the Catholic population.

An official statement of our ministry regarding these questions will be issued in the nearest future.—[*Frankfurter Zeitung*, Nov. 26, 1918.]

Several points seem to stand out as indicating the future development of Prussian education. These are the secularization of the schools, the introduction of professional inspection in place of clerical supervision, increased participation of the teachers in educational administration, and the establishment in some form or other of the *Einheitsschule*. Students who are interested will find it profitable to compare the tendencies here outlined with the proposals of the teachers laid before the Parliament at Frankfurt in 1848.



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DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

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A SURVEY OF HIGHER EDUCATION, 1916-1918

By

SAMUEL P. CAPEN and WALTON C. JOHN

[Advance sheets from the Biennial Survey of Education
in the United States, 1916-1918]



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A SURVEY OF HIGHER EDUCATION, 1916-1918.

By SAMUEL P. CAPEN AND WALTON O. JOHN.

CONTENTS.—Part I. Higher education in the period preceding the war: Standardizing agencies—The junior college—Fifty years of the land-grant colleges—A new association, the American Association of University Instructors in Accounting—University surveys and the survey movement—The Supreme Court of Massachusetts sets aside the Harvard-Technology agreement—The Rhodes scholarships—The Carnegie pension and insurance schemes—Academic freedom of speech—Two State institutions attacked—Special legislation touching higher education—Americanization. Part II. The colleges and the war: Problems raised by the war—Training and the effective organization of training agencies for national service—University committee of the advisory commission of the Council of National Defense—Independent action by colleges in preparation for war service—Students and the draft—Further efforts to secure Federal direction of civilian training agencies—Committee on the relation of engineering schools to the Government—Emergency (American) Council on Education—Committee on education and special training of the War Department.

HIGHER EDUCATION IN THE PERIOD PRECEDING THE WAR.

PART I.

The year 1916-17 undoubtedly marks the close of an important epoch in the history of higher education in the United States. It is impossible to foretell as yet what changes will be wrought in the purposes, methods, and control of higher institutions by the war. But the events mentioned in the closing sections in this review have so completely interrupted the old order, have to such an extent broken up the mold of academic thought, that the calm resumption of the processes and ideas of the past decade is unthinkable. It may therefore be worth while to consider very briefly what have been the main tendencies and achievements in the field of higher education during the past 25 years.

Since the last decade of the nineteenth century there has been no considerable increase in the number of collegiate institutions. Twenty-five years ago there were 594 colleges and universities. In the current Report of the Commissioner of Education there are listed 574 colleges, universities, and technological schools, and 85 independent junior colleges, a total of 662 institutions which report giving instruction above high-school grade. The slight increase in the total number of higher institutions is due to the recent multiplication of junior colleges. There has, in fact, been a decrease in colleges of the older type since 1893. As the benefactions to higher education have been more numerous and substantial in the last 25 years than

ever before, it would appear that there are approximately foundations enough to provide higher educational facilities for those that need and desire them. The distribution of collegiate institutions is, however, very uneven. The East and Middle West are well supplied. The States west of the Mississippi River, on the other hand, exhibit an irregular scattering of higher institutions which, unfortunately, in many regions bears little relation to the distribution of the population to be served. It may be a safe prediction that new foundations of regular collegiate institutions, if deemed necessary at all, are more likely to be made in this region than in the other sections of the country.

In general, the need of the Nation is not so much to increase the number of higher educational institutions as to improve the quality of many of them. There is still a vast difference, as has been implied in previous reports, between what is understood as collegiate and university training in the more favored communities and what goes under the same name in communities served by ill-equipped, understaffed institutions.

The remarkable growth in the wealth and material equipment of a considerable percentage of higher institutions emphasizes this discrepancy in quality. The excellence of higher education does not depend on money alone. Nevertheless, the possession of certain material resources makes it easier for an institution to attain excellence. The well-endowed private colleges and the liberally supported State institutions have therefore set a pace in improving educational standards which less fortunate institutions have found it difficult or impossible to follow. The remarkable expansion of higher education on the material side is indicated by the amounts spent for it 25 years ago and in the year just preceding the war. In 1893 the national expenditure for higher education was \$22,944,776 and in 1916, \$110,532,396. The increase in the number of persons served during the same period is almost equally striking. In 1893 the total collegiate enrollment in the United States was 110,545, in 1916 it was 329,387. It is clear, then, that although the number of higher institutions has not increased very much, there has been a large increase in the amount of higher education provided.

This increase in the amount of higher education corresponds, of course, to an increasing demand for it. Indeed, one of the most patent tendencies of the last quarter of a century has been the democratization of college education. Twenty-five years ago it was regarded as the privilege of the select few, the selection not being made, however, wholly on the basis of wealth or any other artificial class distinctions. The combined pressure of State institutions, large philanthropic enterprises, and the propaganda of leading educational

writers led to the gradual spread of the belief that not only should college education be open to everybody, but that nearly everybody should have it. A certain reaction is to be noted in very recent years from this extreme position. The experiences of higher institutions with large numbers of persons of innate mental limitations has led to the growing conviction among university and college officers that, after all, higher education is for the few and not for the many. But the few must be selected by methods more liberal and democratic than any which have yet been devised.

Coincident with the tendency mentioned in the last paragraph has been the expansion and liberalization of the college curriculum. A quarter of a century ago there was practically but one curriculum for colleges of arts and sciences. Already, however, the virus of the elective system, as put into practice by Harvard, was making itself felt. By the end of another 10 years it had swept the United States, and the reaction against it in its extreme form had begun to set in. Having been freed through the elective system from the shackles of an antiquated and outworn scheme of studies, institutions now began to grope for some new unifying principle to guard against the dangers of intellectual license which appeared in the general working out of the elective system. The new mechanism is the group system. Under various manifestations this principle of curriculum formation has been generally adopted in the public and nonsectarian institutions of the country. Certain colleges and universities under denominational auspices retain in substance the formal curriculum of the late nineteenth century.

The liberalization of college curricula has gone hand in hand with a closer articulation between colleges and secondary schools. In fact, the problem of perfecting this articulation has occupied perhaps an undue amount of the attention of associations of both college and school officers during the past quarter of a century. On the one hand, the schools, responding to a vigorous popular pressure, have asserted their right to an independent development, free from the domination of higher institutions. On the other, the colleges, yielding to the new doctrine of the extension of higher education (and to the ever-present urge for numbers), have abated the rigid prescriptions of subjects which were common 25 years ago. The decline of the entrance examination and the development of accrediting systems are complementary movements during this period. The present extent of coordination between the colleges and secondary schools is indicated in this review (see p. 9).

Foremost in this movement have been naturally the State-supported higher institutions. These, which were conceived as the apex of the school systems of their respective States, have won their way to a degree of influence and popularity which could not have been

foreseen 25 years ago. Indeed, the enormous expansion of State universities and State colleges of agriculture and mechanic arts is one of the outstanding features of the recent history of higher education in this country.

The variation in the excellence of the work done by different types of higher institutions has already been alluded to. With the growth in the number of persons availing themselves of higher educational opportunities, and the increasing mobility of the population of the United States, colleges have been brought into ever-closer and more frequent comparisons with one another. Migrations of students from one institution to another have become more and more common. Larger numbers have gone forward every year from the baccalaureate course to professional and graduate study. The discrepancies in standards, therefore, become painfully apparent. One of the most important tendencies of the last 15 years has been the tendency toward standardization of higher institutions. (This carries with it also a certain amount of standardization of secondary schools.) A large number of agencies have first and last engaged in this work. Associations of higher institutions, both regional and national, independent educational foundations, church boards, and several governmental offices have all played a part. If it were possible to measure higher education or the efficiency of institutions by purely objective criteria applied to the institution and not to its product, one might regard the problem of standardization as solved. Nearly all of the agencies just referred to have elaborated and defined such quantitative measurements as may be applied to an organization which after all eludes the most precise measuring stick. While undoubtedly much good has been accomplished by the activities of standardizing agencies, it is only just to record that there has been also a certain amount of damage. The American educational public has come to think too largely in terms of credits, counts, or material equipment. Confirmation of this statement appears in the evidence recorded in the last five Reports of the Commissioner of Education, and in the proceedings of nearly every sectional and national educational association. Fortunately the reaction against the tendency to estimate all education in quantitative terms has already set in. It should be accelerated by the educational experiences of the war.

Later in the report mention is made of the extraordinary growth of land-grant colleges and the development of university courses in applied science. No doubt the foreign observer would find this phase of our recent educational history the most impressive of all. The relative strength of the liberal college has declined in favor of the vocational higher institution. Colleges and universities not under State control, and primarily founded for the purpose of provid-

ing education in the liberal arts, have been forced by public demand to add numerous professional curricula, such as commerce, journalism, business administration, and the several varieties of engineering. But in this great movement the land-grant colleges and the State universities have been the leaders.

STANDARDIZING AGENCIES.

NON-STATE ACCREDITING AND EXAMINING BOARDS.

Perhaps no question has occupied the time of college and high-school officers more than the administration of college entrance requirements. The organizations charged with the responsibility of controlling entrance examinations have increased in number till they now influence nearly every secondary school of significance in the United States. A numerical summary of the extent of this activity is given in the following paragraphs.

THE NEW ENGLAND COLLEGE ENTRANCE CERTIFICATE BOARD.

The sixteenth annual report of the New England College Entrance Certificate Board states that—

the total number of schools that had the certificate privilege last year from the board is 543, of which 81 had the specimen certificate privilege. Four hundred and fifteen of these (about 76 per cent, as against 84 per cent last year) sent one or more pupils on certificate to the colleges represented on the board. At the present time there are 47 schools on the trial list, 429 on the fully approved list, making a total of 476. To these may be added 74 schools that had the right of sending special students on certificate, making a grand total of 550 schools that have the certificate privilege of the board for the coming year.

The following institutions comprise the membership of the New England College Entrance Certificate Board: Amherst College, Bates College, Boston University, Bowdoin University, Brown University, Colby College, Massachusetts Agricultural College, Middlebury College, Mount Holyoke College, Smith College, Tufts College, University of Vermont, Wellesley College, Wesleyan University, Williams College.

THE COLLEGE ENTRANCE EXAMINATION BOARD.

The College Entrance Examination Board examined 9,265 candidates during the year 1916-17. According to the secretary's report, 988 schools sent candidates to the board's examinations. Of these, 525 were public schools and 463 private schools, sending 2,823 and 6,071 candidates, respectively. In addition there were 371 candidates who were conditioned college students or were prepared by private tutors or were self-prepared or neglected to state how they received their preparation. The public schools sent to the examination 961 fewer candidates than last year, the loss in boys being 792 and in

girls 169. From the private schools there was a loss of 403 boys which was offset in part by a gain of 113 girls. The total number of boys taking the board's examinations in 1918 was less than last year by 1,338.

INCREASING RECOGNITION OF THE COMPREHENSIVE EXAMINATION PLAN.

"Notwithstanding the fact that the number of candidates taking the board's examinations was less this year than last, the number of candidates presenting themselves under the new plan of admission increased from 495 to 580." In 1918 this number has increased to 752.

Under this plan the certificate and examination methods of admission are combined. The candidate presents a certificate from the secondary school testifying to the quantity of work covered. The college takes a sample of the quality by examining him in four subjects. The examination is designed to test the candidate's general knowledge of a given subject and his intellectual power, not to ascertain whether he has mastered a prescribed book or course.

THE NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS.

The North Central Association of Colleges and Secondary Schools at the meeting of March 23-24, 1917, reported 108 colleges, 51 institutions primarily for the training of teachers, and 8 junior colleges on its list of accredited higher institutions. Altogether, 1,225 schools reported, of which 1,164 were finally accredited; 913 were accredited unqualifiedly, 215 were accredited with warning, 39 of the old schools were dropped, and 75 new schools were added.

THE ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE MIDDLE STATES AND MARYLAND.

The Association of Colleges and Preparatory Schools of the Middle States and Maryland reported for 1917 a membership of 68 universities and colleges and 154 secondary schools.

THE ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS OF THE SOUTHERN STATES.

The Association of Colleges and Secondary Schools of the Southern States reported for 1917 a membership of 42 universities and colleges and 47 secondary schools.

Taken altogether, the foregoing reports show for the year 1917 the number of 2,896 public and private secondary schools which are directly affiliated with one or more of these six accrediting or examining organizations.

STATE ACCREDITED SECONDARY SCHOOLS.

The following table shows, for the year 1916, 8,075 secondary schools on the accredited lists of State boards of education or State

universities, or both. As the total number of public and private high schools reported for 1916 is about 14,000, it is of interest to observe that at least 58 per cent of the high schools are connected with a State standardizing or accrediting agency.

Summary of State accredited secondary schools in the United States, 1916.

[The cross (X) means yes.]

States.	Accred- ited second- ary schools.	Accred- ited by State board.	Accred- ited by State univer- sity.	Units re- quired by—		Observations.
				State board.	State uni- versity.	
Alabama.....	121		X	15	14	23 by State board and 21 by State university.
Arizona.....	44	X	X	15	14	
Arkansas.....	82	X	X	15	14	In 1914-15.
California.....	278		X	15	15	In 1915-16.
Colorado.....	73		X	15	15	Units not specified.
Connecticut.....	64	X				State university accredits 10 only. Units not specified.
Delaware.....	11	X	X			Accredited by standard university. Units not specified.
District of Columbia.....	11					
Florida.....	50	X	X	16		59 institutions with 15 units; 38 with 14 units.
Georgia.....	97		X	15	14	
Idaho.....	75		X	15	15	385 by State university; 77 by State department.
Illinois.....	462	X	X	15	15	
Indiana.....	431	X	X	16		99 class A; 79 class B I; 108 class B II; 86 class B III; 13 unclassified.
Iowa.....	351	X	X	15	15	
Kansas.....	385	X	X	15	15	96 class A; 95 class B.
Kentucky.....	191		X	15		18 of the 160 belong to supplementary lists of State universities.
Louisiana.....	160	X	X	14	14	
Maine.....	199	X		14	14	35 first group; 26 second group.
Maryland.....	61	X		15	15	
Massachusetts.....	76	X		15	15	Affiliated with the State university.
Michigan.....	269		X	15	15	
Minnesota.....	261	X	X	15	15	104 group A; 141 group B; 22 group C.
Mississippi.....	144		X	15	14	
Missouri.....	239	X	X	15	15	Four full years required.
Montana.....	73	X	X	15	15	
Nebraska.....	267		X	15	15	19 approved by University of New Mexico; 16 approved by State department.
Nevada.....	17		X	15	15	
New Hampshire.....	79	X		14	14	Units not expressed.
New Jersey.....	183	X		15	14	First grade secondary schools.
New Mexico.....	35	X	X	15	14	
New York.....	714	X				Units not stated.
North Carolina.....	44		X	15	14	
North Dakota.....	53	X	X	15	15	Schools fully accredited.
Ohio.....	606	X	X	15	15	
Oklahoma.....	22	X	X	15	15	144 group I of State universities; 193 on State department lists, besides States universities.
Oregon.....	74	X	X	15	15	
Pennsylvania.....	333	X		15	15	Units not given.
Rhode Island.....	20	X		15	15	
South Carolina.....	29		X	14	14	First class secondary schools.
South Dakota.....	78	X	X	14	14	
Tennessee.....	117	X	X	14	14	
Texas.....	307	X	X	14	14	
Utah.....	31	X	X	15	15	
Vermont.....	79	X		14	14	
Virginia.....	176	X	X	15	15	
Washington.....	164	X	X	15	15	
West Virginia.....	92	X	X	15	15	
Wisconsin.....	319		X	14	14	
Wyoming.....	28		X	15	15	
Total.....	8,075					

RECENT ATTEMPTS OF NATIONAL AND REGIONAL ASSOCIATIONS AT COLLEGIATE
STANDARDIZATION.

Several influential associations of higher institutions have in the past two years added to the already numerous definitions of the standard college and of the junior college. The following are probably the most significant of these efforts.

THE ASSOCIATION OF AMERICAN COLLEGES.

The Association of American Colleges has published a study by Dr. Calvin H. French which in substance establishes three grades of standard colleges. Dr. French designates these as the minimum college, the average college, and the efficient college. The pith of this interesting report is given here:

Comparative table showing the minimum, the average, and the efficient college.

Items compared.	The minimum college, based on 45 typical institutions.	The average college, based on 16 typical institutions.	The efficient college.
Total units required for entrance.....	15	15	15
Total hours required for graduation.....	60	60	60
Number of instructors, excluding president and library officials.....	8	14	46
Teaching hours per week (approximate).....	15	15	15
Enrollment.....	100	166	500
Cost of administration.....	\$7,325	\$6,358	\$13,650
Cost of instruction.....	12,000	16,941	90,000
Cost of maintenance.....	12,675	12,941	49,100
Total cost.....	\$2,000	\$6,214	\$106,750
Average salaries of all instructors.....	1,500	1,210	2,160
Salary of president.....	2,500	2,500	5,000
Average value of plant.....	350,000	236,877	985,000
Average value of endowment.....	432,000	455,010	2,215,000
Total assets.....	782,000	691,887	3,200,000

According to Dr. French, we mean by college efficiency that "all the forces of the institution are working adequately and with the least possible waste to accomplish its chief ends." Can this be done when the library and laboratories are inadequately equipped and supported, or its teachers underpaid and overloaded with work? These are prevalent conditions in many splendid colleges which, however, are not efficient colleges. The following digest gives a summarized statement of the financial needs of standard colleges with from 200 up to 1,000 students:

A standard college of 200 students is one that has a faculty of 21, giving it the equivalent of 17 full-time teachers and 4 full-time administrative officers; an income of \$10,800 from tuitions, \$1,000 from other fees, \$7,000 from room rents or other sources, and \$38,700 from endowment; an expenditure of \$27,500 for instruction, \$10,000 for administration, and \$20,000 for maintenance;

a productive endowment of \$774,000 and a plant worth \$500,000, making a total property of \$1,274,000.

A standard college of 300 students should have a faculty of 31, giving it the equivalent of 28 full-time teachers and 5 full-time administrative officers; an income of \$20,250 for tuitions, \$1,500 from other fees, \$10,500 from room rents or other sources, and \$58,250 from endowment; an expenditure of \$45,000 for instruction, \$15,000 for administration, and \$30,000 for maintenance; a productive endowment of \$1,165,000 and a plant worth \$750,000, making a total property of \$1,915,000.

The standard college of 500 students calls for a faculty of 51, yielding the equivalent of 44 full-time teachers and 7 full-time administrative officers; an income of \$45,000 from tuitions, \$2,500 from other fees, \$17,500 from room rents or other sources, and \$111,000 from endowment; an expenditure of \$99,000 for instruction, \$27,000 for administration and \$50,000 for maintenance; a productive endowment of \$2,220,000 and a plant worth \$1,000,000, making a total property of \$3,220,000.

Standard colleges of 750 students will have, on these estimates, a faculty of 74, yielding the equivalent of 64 full-time teachers and 10 full-time administrative officers; an income of \$67,500 from tuitions, \$3,250 from other fees, \$26,250 from room rents or other sources, and \$197,000 from endowment; an expenditure of \$174,000 for instruction, \$40,000 for administration, and \$80,000 for maintenance; a productive endowment of \$3,940,000 and a plant worth \$1,750,000, making a total property of \$5,690,000.

The standard college of 1,000 students requires a faculty of 97, yielding the equivalent of 85 full-time teachers and 12 full-time administrative officers; an income of \$90,000 from tuitions, \$5,000 from other fees, \$35,000 from room rents or other sources, and \$321,500 from endowment; an expenditure of \$262,500 for instruction, \$60,000 for administration, and \$120,000 for maintenance; a productive endowment of \$6,250,000 and a plant worth \$2,400,000, making a total property of \$8,650,000.

From the standpoint of a study of 52 colleges and universities, Dr. French has decided that 55 per cent of the income should go to instruction, 30 per cent to maintenance, and 15 per cent to administration. Only 20 per cent of the income should be obtained from the students; the remaining 80 per cent should come from endowments.

THE ASSOCIATION OF AMERICAN UNIVERSITIES.

For nearly 20 years the Association of American Universities has considered problems relating to graduate study. Among these problems is that of the proper classification of universities and colleges with respect to their qualifications for preparing candidates for graduate work. At the last meeting of the association held at the State University of Iowa, November 9 and 10, 1917, the committee on classification of universities and colleges presented the following report:

The Association of American Universities approves the following revision of the list of universities and colleges accepted in 1913. It recognizes the institu-

tions in this undifferentiated list as falling within the three groups described by the association in 1914 in the following terms:

GROUP A. Institutions whose graduates should ordinarily be admitted to the graduate schools of this association for work in lines for which they have had adequate undergraduate preparation, with a reasonable presumption that advanced degrees may be taken with the minimum amount of prescribed work and in the minimum time prescribed. Students who choose work in lines for which their undergraduate course has not prepared them adequately must expect to take more time and do additional work.

GROUP B. Institutions from which only those graduates of high standing in their classes who are individually recommended by the department of undergraduate instruction corresponding to that in which they purpose to do their graduate work may be admitted on the same basis as graduates from institutions in Group A.

GROUP C. Other institutions whose graduates should be admitted to graduate schools, but with the presumption that more than the minimum time and minimum amount of work will be ordinarily required for an advanced degree.

Graduates of these institutions (in the case of newer and smaller institutions the graduates of recent classes) presumably will be eligible for admission, with the limitations and reservations stated above to graduate citizenship or status, but without commitment as to the equivalency of the bachelor's degree of an individual student with that of the university admitting him, and without commitment as to the time which will be required by such students to secure an advanced degree.

DEFINITION OF EDUCATIONAL TERMS.

A subcommittee of the National Conference Committee on Standards of Colleges and Secondary Schools, appointed some years ago at the suggestion of Commissioner Claxton, presented on March 1, 1918, a report making certain recommendations which, after modification, were adopted, as follows:

The term "department" is restricted to the various subjects taught; as, for instance, department of Latin, mathematics, of physics, etc.

The term "course" is restricted to the instructional subdivisions of a subject; as, for instance, Course I in English.

The term "group" is restricted to a combination of subjects related in content or method; as, for instance, the group of classical languages, of the biological sciences, etc.

The term "curriculum" is restricted to a combination of courses leading to a certificate, a diploma, or a degree.

The term "division" is restricted to the larger administrative units of a college or university; as, for instance, the extension division, the division of agriculture, the division of arts and sciences.

The term "school," as applied to part of a university, is restricted to that part the standard of admission to which is not less than the equivalent of two years' work in the college, and which offers instruction of not less than two years' duration, leading to a technical or professional degree.

After a long discussion as to the definition of "college," it was voted to print the following provisional definition for criticism and further discussion, action to be taken by the committee next year:

A "college" is an institution requiring for admission graduation from a standard secondary school, or the equivalent, and offering a four-year curriculum leading to the first degree in arts or science, of such character as to qualify for admission to a graduate school of recognized standing.

Such an institution is indicated by the following characteristics:

A minimum requirement for admission of 15 units of secondary work, not more than 2 units of conditions being allowed, all special students under 21 years of age being required to meet all of the usual requirements for admission, preparatory courses, if any, being distinct in faculty, students, and discipline.

A program of studies having a reasonable relation to the resources of the institution.

A curriculum of 4 years of at least 32 weeks each of actual instruction.

Not less than eight departments, each having at least one full-time professor.

A staff, two-thirds of which are of professorial rank, having had at least 4 years of study in a graduate school of good standing, receiving salaries of approximately \$2,000 a year, and teaching not more than 16 hours a week.

A minimum productive endowment, beyond all indebtedness, of at least \$250,000.

An annual income of at least \$40,000 a year, at least half of which is expended for instruction.

An expenditure of at least \$1,000 a year for laboratory equipment and apparatus, and of at least \$500 a year for books and periodicals.

An annual or biennial published report of assets, income, expenditure, faculty, curricula, and student body.

THE NORTH CENTRAL ASSOCIATION REPORT ON STANDARDS OF ACCREDITING COLLEGES
AND UNIVERSITIES.

The North Central Association at the meeting of March 21, 1918, withdrew its membership from the National Conference Committee, and at the same time adopted a separate report embodying standards for accrediting American colleges and universities. The standards given herewith involve the definition of the "standard American college," a definition which differs in many respects from that adopted provisionally by the National Conference Committee:

The "standard American college" is a college with a four-year curriculum, with a tendency to differentiate its parts in such a way that the first two years are a continuation of, and a supplement to, the work of the secondary instruction as given in the high school, while the last two years are shaped more or less distinctly in the direction of special, professional, or university instruction.

The following constitute the standards for accrediting colleges for the present year (1918):

1. The minimum scholastic requirement of all college teachers shall be equivalent to graduation from a college belonging to this association, and graduate work equal at least to that required for a master's degree. Graduate study and training in research equivalent to that required for the Ph. D. degree are urgently recommended, but the teacher's success is to be determined by the efficiency of his teaching as well as by his research work.

2. The college shall require for admission not less than 14 secondary units, as defined by this association.

3. The college shall require not less than 120 semester hours for graduation.

4. The college shall be provided with library and laboratory equipment sufficient to develop fully and illustrate each course announced.

5. The college, if a corporate institution, shall possess a productive endowment of not less than \$200,000.

6. The college, if a tax-supported institution, shall receive an annual income of not less than \$50,000.

7. The college shall maintain at least eight distinct departments in liberal arts, each with at least one professor giving full time to the college work in that department.

8. The location and construction of the buildings, the lighting, heating, and ventilation of the rooms, the nature of the laboratories, corridors, closets, water supply, school furniture, apparatus, and methods of cleaning shall be such as to insure hygienic conditions for both students and teachers.

9. The number of hours of work given by each teacher will vary in the different departments. To determine this, the amount of preparation required for the class and the time needed for study to keep abreast of the subject, together with the number of students, must be taken into account; but in no case shall more than 18 hours per week be required, 15 being recommended as a maximum.

10. The college must be able to prepare its graduates to enter recognized graduate schools as candidates for advanced degrees.

11. The college should limit the number of students in a recitation or laboratory class to 30.

12. The character of the curriculum, the efficiency of instruction, the scientific spirit, the standard for regular degrees, the conservatism in granting honorary degrees, and the tone of the institution shall also be factors in determining eligibility.

13. No institution shall be admitted to the approved list unless it has a total registration of at least 50 students if it reports itself a junior college and of at least 100 students if it carries courses beyond junior college.

14. When an institution has, in addition to the college of liberal arts, professional or technical schools or departments, the college of liberal arts shall not be accepted for the approved list of the association unless the professional or technical departments are of an acceptable grade.

No institution shall be accredited or retained on the accredited list, unless a regular blank has been filed with the commission, and is filed triennially, unless the inspectors have waived the presentation of the triennial blank.

THE JUNIOR COLLEGE.

Three types of junior colleges have recently evolved in this country. The first type, exemplified in the junior colleges of California, is an integral part of the State educational system. The establishment of junior colleges in connection with the city school system tends to keep at home in the local junior colleges large numbers of freshmen and sophomores who otherwise would overcrowd the large universities and make difficult the prosecution of advanced collegiate and university work. The desire to relieve the expensive university plants from the pressure of an undue number of immature students has been an influential factor in the spread of junior colleges of this type.

The second type is found in Missouri and in the South and South-western States. These junior colleges are largely the result of the contraction of small denominational colleges whose degrees and

equipment failed to meet the high standards of the leading State universities of those regions.

The third type of junior college has recently appeared in Wisconsin, the State legislature having granted the State normal schools the privilege of reorganizing their work on the junior college plan.

• DISTRIBUTION OF JUNIOR COLLEGES IN THE UNITED STATES.

The following table gives the number and distribution by States of the independent junior colleges:

TABLE 1.—*Number and distribution of junior colleges.*¹

Junior colleges.		Junior colleges.	
California.....	15	Minnesota.....	2
Missouri.....	13	West Virginia.....	2
Virginia.....	10	Idaho.....	1
Texas.....	10	Iowa.....	1
Illinois.....	8	Kansas.....	1
Kentucky.....	4	Louisiana.....	1
Georgia.....	3	Oregon.....	1
North Carolina.....	3	Washington.....	1
Tennessee.....	3		
Alabama.....	2	Total.....	85
Michigan.....	2		

¹ Not including the normal schools of Wisconsin.

STANDARDS OF ACCREDITING JUNIOR COLLEGES.

The growth of the junior college in its varied forms has called for the adoption of certain standards applicable to these institutions. With this in mind the North Central Association of Colleges and Secondary Schools, at its 1918 meeting, adopted the following standards of accrediting junior colleges:

A "standard junior college" is an institution with a curriculum covering two years of collegiate work (at least 60 semester hours, or the equivalent in year, or term, or quarter credits), which is based upon and continues or supplements the work of secondary instruction as given in an accredited four-year high school. A semester hour is defined as one period of classroom work in lecture or recitation extending through not less than 50 minutes net or their equivalent per week for a period of 18 weeks, two periods of laboratory work being counted as the equivalent of one hour of lecture or recitation.

1. The minimum scholastic requirements of all teachers of classes in the junior college shall be graduation from a college belonging to this association, or an equivalent, and in addition, graduate work in a university of recognized standing amounting to one year.

2. The junior college shall require for registration as a junior-college student the completion by the student of at least 14 units of high-school work as defined by this association.

3. The work of the junior college must be organized on a collegiate as distinguished from a high-school basis.

4. The teaching schedule of instructors teaching junior-college classes shall be limited to 22 hours per week; for instructors devoting their whole time to junior-college classes 18 hours shall be a maximum; 15 hours is recommended as the maximum.

5. The limit of the number of students in a recitation or laboratory class in a junior college shall be 30.

6. Students registered in a junior college who are permitted to enroll in regular high-school classes shall not be given full junior-college credit for such work, and in no case shall the credit thus given exceed two-thirds of the usual high-school credit. No junior college will be accredited unless it has a registration of 25 students if it offers but a single year, and 50 students if it offers more than a single year.

7. The junior college shall have library and laboratory facilities sufficient to carry on its work the same as it would be carried on in the first two years of an accredited standard college.

FIFTY YEARS OF THE LAND-GRANT COLLEGES.

Perhaps no institutions have grown more rapidly in power and in the public favor than the land-grant colleges. These institutions distinctly belong to the State, at the same time they are the only group of institutions with Federal affiliations. Because of this dual attachment they have played an increasingly important part in developing not only our great national resources but also a true national spirit. The important place which the applied sciences now hold in modern university curricula is in a large measure due to the progressive educational policies of the land-grant colleges. Every State in the Union, including the Territories of Hawaii and Port Rico, has one or more institutions receiving the benefits of the Federal land-grant college funds. Alaska is the only Territory which has not established a college of agriculture and mechanic arts, although it has recently accepted the offer of Federal support. Of the 68 land-grant institutions, 51 are for whites and 17 for negroes. The following comparative tables show the general status of these institutions from the standpoints of attendance, teaching force, and income:

Comparative statistical table of land-grant colleges at the close of nearly 50 years of existence.

ENROLLMENT.

Average number of white students:		Average number of all land-grant college students:	
In 1913-1915.....	110, 354	In 1913-1915.....	120, 064
In 1915-1917.....	120, 969	In 1915-1917.....	131, 853
Increase.....	10, 615	Increase.....	11, 888
Per cent of increase.....	9. 8	Per cent of increase.....	9. 9
Average number of colored students:			
In 1913-1915.....	9, 710		
In 1915-1917.....	10, 982		
Increase.....	1, 272		
Per cent of increase.....	13		

Comparative statistical table of land-grant colleges at the close of nearly 50 years of existence—Continued.

NUMBER OF TEACHERS.

Average number of white teachers :		Average number of all land-grant college teachers :	
In 1913-1915-----	9, 880	In 1913-1915-----	9, 900
In 1915-1917-----	9, 885	In 1915-1917-----	10, 420
Increase-----	505	Increase-----	520
Per cent of increase-----	5. 3	Per cent of increase-----	5. 2
Average number of colored teachers :			
In 1913-1915-----	520		
In 1915-1917-----	539		
Increase-----	19		
Per cent of increase-----	3. 6		

STUDENTS ENROLLED IN MILITARY SCIENCE.

Average number of white students :		Average number of all students :	
In 1913-1915-----	27, 673	In 1913-1915-----	29, 905
In 1915-1917-----	32, 486	In 1915-1917-----	34, 222
Increase-----	4, 815	Increase-----	4, 817
Per cent of increase-----	17	Per cent of increase-----	14. 4
Average number of negro students :			
In 1913-1915-----	2, 232		
In 1915-1917-----	1, 732		
Loss-----	496		
Per cent of loss-----	22		

TOTAL INCOME.

Average total income :	
In 1913-1915-----	\$33, 333, 859
In 1915-1917-----	\$39, 600, 345
Increase-----	\$6, 266, 486
Per cent of increase-----	18. 7

THE ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

The Association of American Agricultural Colleges and Experiment Stations (the principal collegiate association with an exclusively land-grant college membership) in its last two meetings has given special attention to the questions of internal administration. The complex character of the land-grant college, with its divisions of liberal arts, agriculture, engineering, home economics, and experiment stations, has raised problems somewhat difficult of solution. The committee on college organization and policy of the association at its 1917 meeting made a report concerning the administrative relationships of the agricultural college. The report, which was accepted by the association, was based upon a statement of principles and recommendations prepared by the specialist in agricultural education of the Bureau of Education. The recommendations contained in the report¹ follow:

1. That the individual specialist, capable of working independently, should be regarded as the unit of organization.

¹ An amplification of these recommendations may be found in Higher Education Circular No. 8, U. S. Bureau of Education.

2. That the group of working specialists on any one of the recognized subjects, regardless of the kind of service, should constitute the subject-matter department.

3. That specialists should devote their time mainly to one kind of service, but provision should be made for exchanges for the mutual advantage of each.

4. That one member of each department should be designated as chairman, or administrative head.

5. That the members of the subject-matter department should be given a voice in the designation of their chairman or administrative head.

6. That authority for subject matter should be confined to the group of specialists comprising the subject-matter department, and that administrative control should be limited to the amount and method of work.

7. That the distribution of administrative authority should be on the basis of the kind of service.

8. That the three kinds of service, each in charge of a secondary administrative officer, should be coordinated under a chief executive who, in the case of a large institution composed of several faculty groups, should be an officer other than the president.

9. That the official designation "dean" in an agricultural college should be applied only to the chief executive officer who is responsible for the coordination of the three phases of agricultural service, and that of "director" should be applied to the coordinate officers in charge of each of the three lines of service—resident instruction, research, and extension.

10. That when one individual performs the duties of two or more offices his official designation should identify clearly the officer with the respective offices assigned.

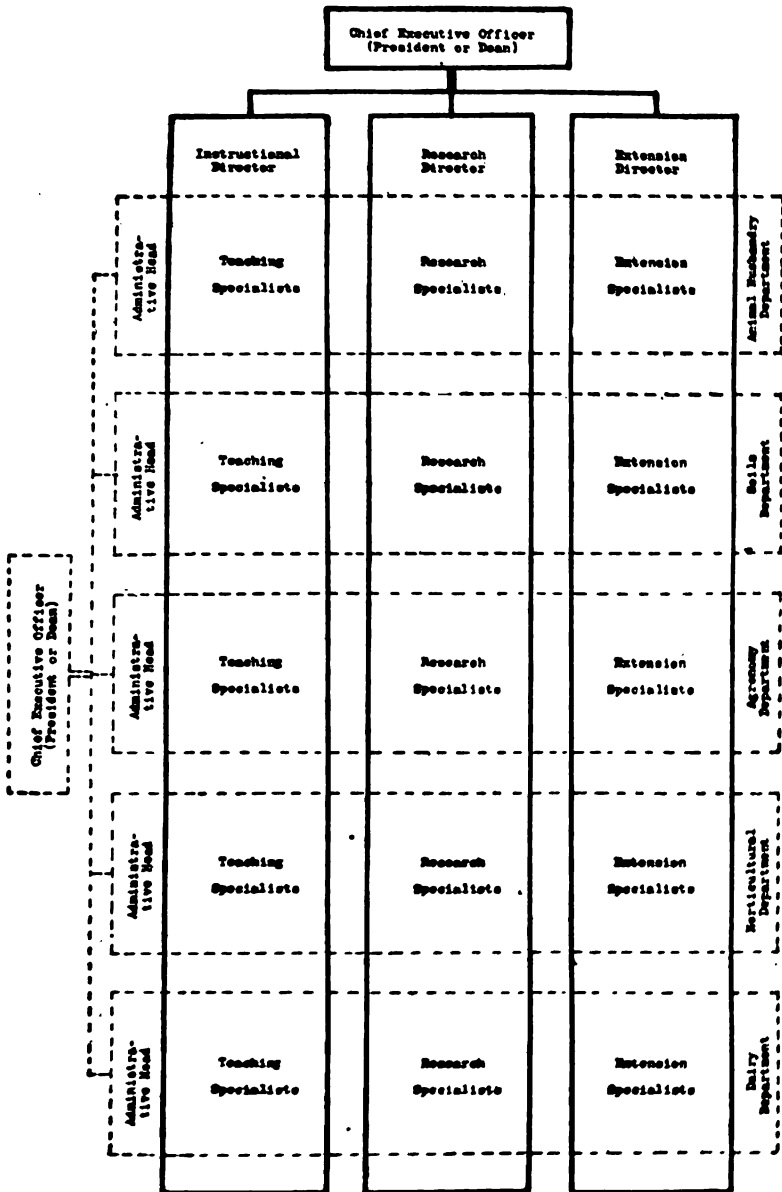
11. That the leaders in charge of the various phases of the extension service should be regarded as administrative officers and should not usurp the duties of the specialists in the various subjects. Where an individual serves both as specialist and administrative leader, a dual responsibility should be recognized.

12. That in the promotion of extension projects controlled by either connected or cooperating colleges, the same administrative relations with the subject-matter departments concerned should exist as with departments that are organically connected.

13. That incoming correspondence, except that of an administrative nature, should be referred to the subject-matter departments concerned, and there referred to the individual best qualified to supply the information called for.

14. That specialists in whatever kind of service should be on an equal basis from the standpoint of rank and official designation. If differentiation of extension and research specialists is desirable, the prefixes "extension" and "research," respectively, may be used in connection with the customary professorial titles.

The accompanying diagram may serve to explain the administrative relationships referred to above.



Common administrative relationships in colleges of agriculture. Administrative authority follows two channels— one through the directors in charge of each kind of service and the other transversely through the several heads of departments— frequently resulting in conflict. The remedy consists in transferring administrative authority from the heads of departments to the directors of the three kinds of service, resulting in single administrative control.

A NEW ASSOCIATION—THE AMERICAN ASSOCIATION OF UNIVERSITY INSTRUCTORS IN ACCOUNTING.

The teachers of accounting of 16 universities met at Columbus, Ohio, December 28, 1916, and formed an organization known as the American Association of University Instructors in Accounting. The purpose of this organization is to advance the cause of education for business through the study of accounting, to have suitable opportunities for the discussion of problems, to promote more intimate mutual acquaintanceship, to further the standardization of courses, and to recommend policies regarding the reception of migrating students.

The charter members are from the following universities: California, Duquesne, Pittsburgh, Cornell, Yale, Ohio State, Ohio, Cincinnati, Oregon, Wisconsin, Texas, Illinois, Minnesota, Northwestern, Brigham Young, and New York. The association reported 154 degree-granting institutions which offer courses in accounting in this country.

UNIVERSITY SURVEYS AND THE SURVEY MOVEMENT.

Since 1915, eight States¹ have voluntarily submitted their tax-supported higher educational institutions to expert criticism in order to determine their needs with more scientific precision. These surveys have been conducted under the auspices of the Bureau of Education, with cooperation of experts of State and National reputation. The result is that the colleges, on the whole, have been able to strengthen their influence in their constituencies, and correspondingly, the general public and the legislatures have been led to give a more intelligent and sympathetic support than heretofore. The reports of the surveys of the State institutions of Oregon, Iowa, Washington, North Dakota, and Nevada have been discussed in preceding reports. (See Reports of the Commissioner, 1915, pp. 145; 1916, pp. 121.)

THE SURVEY OF THE UNIVERSITY OF ARIZONA.

During the fall of 1916 a survey of educational conditions in the State of Arizona was begun. The study of the State university was made by the specialist in higher education of the Bureau of Education, and President Livingston Farrand, of the University of Colorado.

¹ The following States have concluded surveys of their State-supported institutions of higher education: Oregon, Iowa, in 1915; Washington, North Dakota, Nevada, Arizona, in 1916; South Dakota in 1917. The reports of the first five surveys, with the exception of the Oregon survey, are now published as bulletins of the Bureau of Education. The other reports are in press. The University of Oregon survey is published by the university.

The following brief summary includes a few of the more important recommendations of the committee:¹

Summary of recommendations.

- (a) The better adaptation of the college courses to the needs of the State.
- (b) The rejection by the legislature of any proposals to separate the college of agriculture or any other technical division from the main body of the university, and to establish it at another place.
- (c) The extension of the tenure of office of the regents from four to eight years.
- (d) A more definite policy respecting the tenure of the university faculty.

THE SOUTH DAKOTA SURVEY.

The South Dakota survey was conducted during the fall and winter of 1917. The survey committee was composed of the specialist in rural school practice, the specialist in higher education, and the specialist in agricultural education of the Bureau of Education, in collaboration with Prof. Alexander Inglis, of Harvard University, and local officers appointed by the State. The following brief summary of recommendations is given:

1. It was recommended that the State university, the State college, and the State school of mines be consolidated into a single institution, located preferably in the central portion of the State.
2. In case consolidation seems impracticable, it was recommended that the school of mines be abolished and that the State university and the State college readjust their curricula and courses so as to avoid needless duplication. The principle of major and service lines of work was reindorsed.
3. It was also recommended that one or more junior colleges be established as a part of the State higher educational system.

In this and other surveys the Bureau of Education has stood for policies which would tend to improve the mutual relations of State-controlled institutions of higher education in harmony with the peculiar needs of each State. The bureau has consistently urged the continuance or the adoption of the principle of consolidation when practicable. It has also pointed out the distinctive fields of each State institution on the basis of justifiable duplication when consolidation was impracticable.

THE SUPREME COURT OF MASSACHUSETTS SETS ASIDE THE HARVARD-TECHNOLOGY AGREEMENT.

For nearly three years Harvard University and Massachusetts Institute of Technology have avoided expensive duplication in the teaching of engineering by the adoption of an excellent plan of

¹ For a more extended discussion of this and other surveys see Bulletin, 1918, No. 45, Educational Surveys. For report on normal schools see Bulletin, 1917, No. 48, Educational Conditions in Arizona.

cooperation. Under this plan the university turned over to the institute three-fifths of the income of the McKay endowment (now about \$1,500,000) and agreed to use the extensive laboratories of the institute for the training of men seeking engineering degrees. The engineering faculties of both institutions were merged into a single faculty, which worked under the executive control of the president of the institute. Each institution retained control of its own expenditures and determined its own engineering degree requirements. According to President MacLaurin, the "agreement marked an epoch in the history of educational progress in this country." "The end sought was to build up an educational machine more useful to the community and to the Nation than anything that could be maintained by either the institute or the university acting independently." The result of the merger has proven very satisfactory, both institutions having gained thereby in educational power.

Inasmuch as the validity of the agreement had been questioned, the university asked the supreme court of the State for a decision on the matter. The following extracts from the decision made November 27, 1917, are given herewith:

Mr. McKay intended that not only the investment of the endowment funds but the education which his endowment was to make possible should be under the control and direction of the university, its government, and administration.

In our opinion, the intention of Gordon McKay is not in fact carried out in the agreement in controversy, as we have construed its provisions in their practical operation.

We are constrained to instruct the plaintiff that it can not lawfully carry out this agreement between it and the institute, as far as respects the property received by the University, under the deeds of trust and the will of Gordon McKay.—(Massachusetts Reports, 228, 1918.)

According to Prof Swain:

The decision indicates quite clearly that it was not cooperation with Technology in itself that was considered to render the agreement invalid, but only the character of that cooperation. It had the appearance of putting too much control of school and finance into the hands of Technology. The Technology faculty had practical control of the Harvard school.

Notwithstanding the adverse opinion of the court, the authorities of both institutions set about to develop a new plan which would yield the advantages of cooperation without being contrary to the provisions of the McKay will. A plan was recently adopted which seems to meet the necessary requirements, having received the approval of the trustees of the McKay estate and the governing boards of the university, and it now awaits the approval of the court. The new plan follows:

Voted to establish a school of engineering upon the following basis:

Whereas, in reconstructing an engineering school in Harvard University, it is important to lay stress upon fundamental principles; to make use of the

courses in Harvard College so far as is consistent with the curriculum of the school; and to conduct the school under a faculty of its own, the corporation hereby adopts the following plan of organization:

1. Name. The name of the school shall be the Harvard Engineering School.

2. Departments. The school shall provide "all grades of instruction from the lowest to the highest," and the instruction provided shall "be kept accessible to pupils who have had no other opportunities of previous education than those which the free public schools afford."

3. Admission. Inasmuch as the entrance examinations to Harvard College now admit freely boys from good high schools, the requirements for admission to the engineering school shall be the same as for admission to Harvard College. Admission to advanced standing and special study shall be administered by the engineering faculty.

4. Fees. The fees of students in the school shall be the same as for students in Harvard College, except that supplementary fees for additional or for laboratory courses may be charged.

5. Classrooms and laboratories. The work of the school shall be carried on in the classrooms and laboratories of the university, but arrangements may be made from time to time for the use of the facilities of other institutions for any part of the work (in its advanced technical courses) when the needs, financial resources, and best interests of the school so require.

Arrangements for the use of facilities of other institutions, or the interchange of instruction, shall be made for a period of only one year at a time.

When there shall be income from the funds of the McKay endowment available, in the judgment of the president and fellows, for the construction of new buildings for the engineering school, containing offices, laboratories, workrooms, and classrooms, such buildings are to be constructed on Harvard University grounds and bear the name of Gordon McKay.

6. Faculty. The faculty of the school shall consist of the president of the university and of those professors, associate professors, assistant professors, and instructors appointed for more than one year, the greater part of whose work of instruction is done in the school, and of a limited number of other teachers of subjects offered in the school to be appointed in the usual way. The term of appointment of a teacher from any other institution who gives instruction in the school shall be for one year only; his title shall be lecturer, instructor, or assistant.

The faculty shall, under the direction of the corporation, have control of all instruction given in the school wherever the instruction may be given.

7. Degrees. A student satisfactorily fulfilling the requirements of a prescribed four-year program in any of the engineering fields shall be awarded the degree of bachelor of science in that field.

The degree of master of science, or an equivalent degree, shall be awarded upon the successful completion of at least one additional year of study. For the doctors' degree the requirements shall be similar to those in the graduate school of arts and sciences.

8. Credit for instruction elsewhere. As in the case of every faculty, the faculty of the engineering school may, in its discretion from time to time, allow credit toward the degree under its control for instruction received at another institution or by other instructors.

9. Courses in the school, or the services of its staff, may be made available to qualified students of other institutions.

10. This plan shall be submitted to the supreme judicial court of Massachusetts, or a justice thereof, for approval.

THE RHODES SCHOLARSHIPS.

Nearly one-half of the 400 American Rhodes scholars are now in military or Government service, including practically all of the men of recent years. Six, according to present reports, have lost their lives in the service. Since 1914 the regular operation of the scholarships has been seriously interfered with by the war, and before the United States entered the struggle a large number of the men had already engaged in relief work in Belgium or in duties connected with the Red Cross, the Y. M. C. A., and the ambulance services.

Since the entry of the United States into the war no more selections of American Rhodes scholars have been made. The appointments, however, are only postponed, and the vacancies will be filled when conditions are again normal. New plans for giving publicity for the scholarships and for making the selections are now being worked out. It seems probable that the result of the war will be to intensify the interest in the scholarships as one means for the unification of the Anglo-Saxon race. The German scholarships have been abolished by a special act of Parliament and the funds allotted to various British colonies. The University of Oxford has instituted the degree of Ph. D. and is preparing for extensive organization of graduate work.

In this connection a mission from the British universities which has just finished a tour of the United States is undertaking to arrive at agreements with American universities for mutual recognition of graduate work and for the exchange of students and professors. It is expected that many American officers may be able to spend some time in English universities during the period of demobilization and to that end special short courses have been established in most English institutions for the special benefit of these men. For example, all American students, whether Rhodes scholars or not, will be eligible to take degrees at Oxford under the new war regulations. These regulations provide that any man who has been in military service for at least a year can be admitted to the university without examination, excused from all intermediate examinations, and allowed to take his degree in two years, or even in one if he has had the necessary preparation.

It is perhaps too soon to speak of any large results of the Rhodes scholarships on American education. It may, however, be noted as significant that the system of honors, examinations, and of tutorial instruction has been rapidly gaining ground in American universities during the last half dozen years, and in most institutions where this is the case Rhodes scholars are engaged in administering the new plan.

In order to facilitate the new arrangements for the selection of Rhodes scholars in the United States and to provide a convenient source of information on this side of the ocean, the Rhodes trustees have recently appointed Prof. Frank Aydelotte, of the Massachusetts Institute of Technology, Cambridge, Mass., as American secretary for the scholarships.

THE CARNEGIE PENSION AND INSURANCE SCHEMES.

Early in 1916 President Pritchett, of the Carnegie Foundation, proposed a new plan which, it was hoped, would gradually supplant the pension system which has been administered by the Foundation for the past 10 years. The plan as described by the Dartmouth committee, which is included in the replies of the presidents and committees of the associated institutions concerning the proposal, in the eleventh annual report of the Carnegie Foundation, contemplates—

The incorporation under the laws of New York of an insurance and annuity agency for the benefit of college teachers. Each teacher upon his entrance into service in the college would be required to take out with this insurance agency a minimum amount of term insurance to mature at the age of 65, and to purchase by annual contributions a minimum annuity which would begin upon retirement from teaching and at the expiration of the insurance. To make the annuity provision effective, a separate savings association is to be created which receives the annual contributions of the teachers and invests them, purchasing at the time of retirement with the accumulations an annuity from the insurance association. It is proposed that the college shall participate to the extent of 50 per cent of the cost of insurance and annuity up to an agreed minimum, or as an alternative that the college shall contribute only toward the purchase of the annuity. The individual is free to increase the amount of both insurance and annuity at will, and it is expected that he will increase his contributions as his salary increases. The details of the plan are not fully stated. It is clear, however, that agency expenses, a large factor in old line insurance, would be avoided.

Administrative expenses and taxes are apparently to be borne by the Foundation, although at one point there is a suggestion that the administrative expenses may come from surplus if there is any. It is not definitely stated what disposition would be made of surplus, should the mortality experience prove to be more favorable than the tables upon which the rates will be based, but the inference is clear that such a condition will lead to the payment of dividends to the policyholders. The Foundation is to guarantee $4\frac{1}{2}$ per cent interest on invested funds.

One unique and distinctly favorable feature of the plan is that which provides for the return of accumulations toward an annuity in case of death, disability, or withdrawal before the annuity is available. Again, even after the annuitant has come into possession of his annual income, any balance of invested funds to his account are returned to his estate in case of death.

In case of death of the annuitant, his widow will receive half of his annuity during her life. The disability privileges are to be made available at the end of 15 years as professor instead of 25 years under the present plan. After this period of service and in case of complete disability, the Foundation will, at its

own cost, pay the insurance premiums and a minimum pension of \$1,200 a year during the period of disability.

The plan was not well received on its first submission to the associated institutions. It was, however, readily conceded that the Foundation would have to be relieved of some of its growing financial burdens. But the institutions which are beneficiaries of the Foundation expressed the opinion that:

The privileges and expectations which have been created under the existing rules of the Carnegie Foundation constitute moral claims against the endowment on the part of such teachers and administrative officers now on the staff of associated institutions as under the present rules would receive retiring allowances and that adequate provision for scrupulously satisfying all these claims should be made before the fund is otherwise drawn upon.¹

In view of the opposition to the plan, the matter was officially brought to the attention of a joint commission including six members of the board of trustees, two members of the American Association of University Professors, one member of the Association of American Universities, one member of the National Association of State Universities, and one member of the Association of American Colleges. After mature consideration the commission unanimously adopted the following resolutions:

Voted: Referring to the resolution of the board of trustees of the Carnegie Foundation, adopted in November, 1915, that "whatever plan is finally adopted will be devised with scrupulous regard to the privileges and expectations which have been created under existing rules," this commission expresses the opinion that the extension to all teachers at present in the associated institutions of the privilege of continuing in the present system would completely meet all their reasonable expectations. The commission assumes that the trustees of the Carnegie Foundation will in due time announce a date after which the privileges and expectations of the present system will not be available to those newly entering upon the profession of teaching.

Voted: That the trustees of the Carnegie Foundation be requested to give all possible consideration to the needs of the older teachers in institutions which are not yet, but may be later, associated with the Foundation.

Voted: The commission does not know the extent to which assistance can be obtained outside the present funds of the Foundation, but it is acting on the expectation of substantial assistance in carrying a large but limited load, and with the further understanding that adequate assistance can not be obtained to carry on the ever-increasing pension burden without calling upon institutions and individual teachers to bear a share.

In harmony with the last recommendation the commission recommended to the trustees of the Carnegie Foundation a plan of insurance and annuities. The purpose of this new organization is—

to set up the machinery under which the teacher may protect himself and his family from dependence, whether by his own death or by old age or by disability; to furnish to the teacher the security of a contract, so that the man who enters upon the accumulation of an annuity at 30 may have a

¹ Eleventh Annual Report of Carnegie Foundation.

contract for its fulfillment at the agreed age; to afford these forms of protection in such manner as to leave to the teacher the utmost freedom of action and to make his migration from one institution to another easy. Finally, whatever machinery is set up to accomplish these purposes should be operated at a cost within the reasonable ability of the teacher to pay.

The proposed charter embodying these purposes is under the title of the Teachers' Insurance and Annuity Association of America. The incorporators who subscribed their names February 1, 1918, are as follows: Elihu Root, Nicholas Murray Butler, Arthur Twining Hadley, Jacob Gould Schurman, Alex. C. Humphreys, Charles P. Stone, John Bassett Moore, Robert Weeks de Forest, George Woodward Wickersham, Newcomb Carlton, Edward Robinson, George Foster Peabody, and Henry S. Pritchett.

ACADEMIC FREEDOM OF SPEECH.

Up to the year 1917-18 the problem of academic freedom of speech involved chiefly the expression of opinions on social and economic questions. With the coming of the war the danger zone shifted. It is natural in times of great national tension like the present that the personal views of thinking men should be expressed with greater vigor or passion than usual. Differences of opinion on questions of national or international policy, ventilated with heat on both sides, easily lead to the impugning of motives and even to the damning charge of disloyalty. As a result of this surcharged condition of the intellectual atmosphere, many doubtless well-meaning individuals have suffered the extreme academic penalty for utterances which under ordinary circumstances would be passed by with scant notice or criticism. There has developed, therefore, a special problem of academic freedom of speech in war time.

LEADING OPINIONS ON THE PROBLEMS OF ACADEMIC FREEDOM OF SPEECH.

One of the discussions on this subject appeared in the joint report of the Columbia University committee on education and the special committee on the state of teaching. It is of particular interest as embodying an expression of the policy of the board of trustees:

In the whole history of the university, dismissals from the university of a member of the teaching staff have been but six in number; and the record shows that in all of these cases but one the judgment and opinion of representative members of the teaching staff were before the trustees as an important element in affecting their action. In the one exceptional case the reasons for action had no reference to the academic work or relations of the person concerned.

The power of removal has been exercised by the trustees only in these very rare instances, and then only after full investigation and (save in the one case above mentioned) consultation with members of the faculties. In each case

there had been a state of facts which in the judgment of the trustees rendered such action imperative.

In view of these facts there can be no ground for apprehension on the part of anyone that the charter powers of the trustees will be arbitrarily exercised.

In the whole history of Columbia University there is no instance where the trustees have ever subjected any teacher to restraint or discipline by reason of his classroom teaching. The trustees have more than once been urged by other members of the university, by alumni, by parents of students, and by the public press, to take action of this character, but they have never done so. Yet ultimate decision as to whether the influence of a given teacher is injurious to private morals or dangerous to public order and security is one which the trustees may neither shirk nor share nor delegate. We fully concur in the opinion expressed by the president in his annual report for 1910 that academic freedom imposes academic responsibility, and that there are distinct limitations upon academic freedom which should be self-imposed, namely, "the limitations imposed by common morality, common sense, common loyalty, and a decent respect for the opinions of mankind."

In the 1916-17 annual report of the president of Columbia University a more complete statement is made concerning the questions of academic freedom and tenure, the following quotations from which are herewith appended:

It would be little short of a calamity were it not possible for an academic teacher to change his place of occupation without thereby reflecting upon the intelligence or the integrity of those with whom he had been associated, and similarly, if it became impossible for the governing board of a school system or of a school or college to substitute one teacher for another without bringing charges against the person displaced. Any contrary theory assumes a preestablished harmony of which not even Leibnitz dreamed and a preestablished competence which would render it impossible for anyone to be appointed to a teaching position who was not ipso facto entitled to steady promotion and increase in compensation and to a lifelong tenure. * * * Security of tenure is desirable, but competence and loyalty are more desirable still, and a secure tenure purchased at the price of incompetence and disloyalty must sound a deathknell to every educational system or institution where it prevails. These are all matters of grave importance in the government of an educational system or an educational institution. They can not be dismissed with phrases or formulas, but must be met and decided in accordance with sound principle and the public interest.

There is no real reason to fear that academic freedom * * * is or ever has been in the slightest danger in the United States. Evidence to the contrary is quite too manifold and too abundant. What is constantly in danger, however, is a just sense of academic obligation. When a teacher accepts an invitation to become a member of an academic society, he thereupon loses some of the freedom that he formerly possessed. He remains, as before, subject to the restrictions and the punishments of the law; but in addition he has voluntarily accepted the restrictions put upon him by the traditions, the organization, and the purposes of the institution with which he has become associated. Try as he may, he can no longer write or speak in his own name alone. Were he to succeed in so doing, what he might write or say would have, in nine cases out of ten, no significance and no hearing. What he writes or says gains significance and a hearing because of the prestige of the academic society to which he

belongs. To that prestige, with all that that word means, the academic teacher owes a distinct, a constant, and a compelling obligation. To maintain one's connection with an academic society while at war with its purposes or disloyal to its traditions and organization is neither wise nor just. No one is compelled to remain in an academic association which he dislikes or which makes him uncomfortable. What the ancient Stoic said of life itself is true of a university: "The door is always open to anyone who has an excuse of leaving."

On the other hand, academic obligation is reciprocal. The academic society of which the individual teacher is a member owes him encouragement, compensation as generous as its resources will afford, and protection from unfair attack and criticism, as well as from all avoidable hamperings and embarrassments in the prosecution of his intellectual work. Each individual member of an academic society is in some degree a keeper of that society's conscience and reputation. As such, the society as a whole must give him support, assistance, and opportunity.

The same type of mind which insists that it knows no country but humanity, and that one should aim to be a citizen of no State but only of the world, indulges itself in the fiction that one may be disloyal to the academic society which he has voluntarily joined, in order to show devotion to something that he conceives to be higher and of greater value. Both contentions affront common sense and are the result of that muddled thinking which to-day is bold enough to misuse the noble name of philosophy. One effect of much recent teaching of what once was ethics is to weaken all sense of obligation of every kind except to one's own appetites and desire for instant advantage. That economic determinism which is confuted every time a human heart beats in sympathy and which all history throws to the winds has in recent years obtained much influence among those who, for lack of a more accurate term, call themselves intellectuals. These are for the most part men who know so many things which are not so that they make ignorance appear to be not only interesting but positively important. They abound just now in the lower and more salable forms of literary production, and they are not without representation in academic societies.

The time has not yet come, however, when rational persons can contemplate with satisfaction the rule of the literary and academic Bolsheviks or permit them to seize responsibility for the intellectual life of the Nation.

Neglect of one's academic obligation, or carelessness regarding it, gives rise to difficult problems. Men of mature years who have achieved reputation enough to be invited to occupy a post of responsibility in a university ought not to have to be reminded that there is such a thing as academic obligation and that they fall short in it. It is humiliating and painful to find, with increasing frequency and in different parts of the country, men in distinguished academic posts, who choose to act in utter disregard of the plainest dictates of ethics and good conduct. It is fortune indeed that, however conspicuous are instances of this disregard, they are in reality negligible in number when compared with the vast body of loyal, devoted, and scholarly American academic teachers. It is noticeable, too, that instances of this lack of sense of obligation rarely arise, if ever, in the case of those men whose intellectual occupations bring them in contact with real things. It is only when a man is concerned chiefly with opinions and views, and those opinions and views of his own making, that he finds and yields to the temptation to make his academic association the football of his own ambitions or emotions.

The opinion of the committee on academic freedom and academic tenure, of the American Association of University Professors, is as follows:¹

It is a grave abuse of the power of dismissal when it is used to deny to members of the university faculties the enjoyment of their fundamental constitutional rights as citizens; and an institution in which dismissal is possible upon such a ground as was officially put forward in this case is one in which adequate guaranties of academic freedom are manifestly lacking. It is in some respects a still graver abuse of power when administrative officers or governing boards attempt by their official declarations publicly to attach the stigma of treasonable or seditious conduct to an individual teacher because of acts of his which are in fact neither treasonable nor seditious.

When charges are brought against a member of a college or university faculty upon any ground, the proceedings should, as a matter of course, be strictly judicial in character, and should be in accord with the principle of faculty responsibility. In other words, the person accused should be entitled to have the charges against him stated in writing in specific terms, and to have a fair trial on those charges before either the judicial committee of the faculty or a joint committee composed of an equal number of professors and trustees, which should render definite finding, stating in case of a decision adverse to the accused the precise acts on which the decision is based. The importance of maintaining these procedural safeguards against hasty or unjust action is, if possible, even greater at a time of popular excitement and heightened passions than under normal conditions.

One of the most helpful statements made this year bearing on the question of academic freedom is that found in President Lowell's annual report for 1916-17. The following quotations are of special interest:

The war has brought to the front in academic life many questions which are new, or present themselves to many people in a new light. One of these is liberty of speech on the part of the professor; and it seems a not unfitting time to analyze the principles involved, and seek to discover their limitations. In so doing I shall deal only with higher education, that is with universities and colleges.

Experience has proved, and probably no one would now deny, that knowledge can advance, or at least can advance rapidly, only by means of an unfettered search for truth on the part of those who devote their lives to seeking it in their respective fields, and by complete freedom in imparting to their pupils the truth that they have found.

The teaching by the professor in his classroom on the subjects within the scope of his chair ought to be absolutely free. He must teach the truth as he has found it and sees it. This is the primary condition of academic freedom, and any violation of it endangers intellectual progress. In order to make it secure it is essential that the teaching in the classroom should be confidential. This does not mean that it is secret, but that what is said there should not be published. If the remarks of the instructor were repeated by the pupils in the public press he would be subjected to constant criticism by people not familiar with the subject, who misunderstood his teaching; and, what is more important, he would certainly be misquoted, because his remarks would be reported by the student without their context or the qualifications that give

¹ See Bulletin of American Association of University Professors, April, 1918.

them their accuracy. Moreover, if the rule that remarks shall not be reported for publication elsewhere is to be maintained, the professor himself must not report them. Lectures open to the public are a different footing, but lectures in a private classroom must not be reported to the newspapers. That principle is, I believe, observed in all institutions. * * *

Every professor must, therefore, be wholly unrestrained in publishing the results of his study in the field of his professorship. It is needless to add that for the dignity of his profession, for the maintenance of its privileges, as well as for his own reputation among his fellows, whatever he writes or says on his own subject should be uttered as a scholar, in a scholarly tone and form. This is a matter of decorum, not of discipline; to be remedied by a suggestion, not by a penalty.

In troublous times much more serious difficulty and much more confusion of thought arises from the other half of our subject, the right of a professor to express his views without restraint on matters lying outside the sphere of his professorship. This is not a question of academic freedom in its true sense, but of the personal liberty of the citizen. It has nothing to do with liberty of research and instruction in the subject for which the professor occupies the chair that makes him a member of the university. * * *

The university or college is under certain obligations to its students. It compels them to attend courses of instruction, and on their side they have a right not to be compelled to listen to remarks offensive or injurious to them on subjects of which the instructor is not a master, a right which the teacher is bound to respect.

In spite, however, of the risk of injury to the institution, the objections to restraint upon what professors may say as citizens seem to be far greater than the harm done by leaving them free. In the first place, to impose upon the teacher in a university restrictions to which members of other professions, lawyers, physicians, engineers, and so forth, are not subjected, would produce a sense of irritation and humiliation.

In accepting a chair under such conditions a man would surrender a part of his liberty; what he might say would be submitted to the censorship of a board of trustees, and he would not be a free citizen. The lawyer, physician, or engineer may express his views as he likes on the subject of the protective tariff; shall the professor of astronomy not be free to do the same? Such a policy would tend seriously to discourage some of the best men from taking up the scholar's life. It is not a question of academic freedom, but of personal liberty from constraint; yet it touches the dignity of the academic career.

It should be noted in passing that a number of American institutions have been obliged to take action on the unpatriotic activities and utterances of teachers of German origin or avowed German sympathies. The dismissals resulting in these cases have nowhere been regarded as breaches of academic freedom.

THE WORK OF THE COMMITTEE ON ACADEMIC FREEDOM AND ACADEMIC TENURE OF THE AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS.

During the past two years the committee on academic freedom and academic tenure of the American Association of University Professors has had brought to its attention over 30 cases of alleged infringement of the principles of academic freedom of speech and academic

The. The opinions and decisions of this committee and its sub-committees, some of which have been quoted in former reports of the Commissioner of Education, have grown in weight and importance in the academic world. The committee, by its conservative attitude, has been able to eliminate from public discussion and criticism a large proportion of the cases brought to its doors, and it has also been able to help in the solution of many problems by dealing privately with the institutions and individuals concerned.

The committee has centered its attention on a limited number of cases which led to the exposition of principles underlying academic freedom of speech and permanency of academic tenure. It has in no sense sought publicity. The rulings of the committee have been largely based on the principles stated in the 1915 report of the association. Taken together, the decisions of the committee, already covering a large variety of cases, lay the foundation of a new type of educational law which should prove to be of great value in solving equitably the complex problems of academic freedom of speech and academic tenure.

During the period under review two reports involving questions of academic tenure not relating to freedom of speech have been made by committees of the American Association of University Professors. The first of these was an investigation into the reasons for the dismissal of Miss Winona A. Hughes, dean of women at the College of Wooster, and the methods used by the board of trustees in severing her connection with the college. The committee found the action of the president and the board to be arbitrary, unjustifiable, and such as to jeopardize seriously the standing of the college among American higher institutions. It declared that "the methods of the present administration have not been such as to appeal to the loyalty of a conscientious and self-respecting faculty, and it is equally obvious that they are not the methods which gain for a college the confidence and respect of the academic world."

On June 7, 1917, the State board of education of the State of Montana decided not to retain as president of the State university Dr. E. B. Craighead, who had acted in that capacity for three years. The State board also decided not to reemploy three professors of the university. The matter having been brought before the committee on academic freedom and academic tenure, it was the opinion of the committee after careful investigation that the dismissal of President Craighead and the three professors was not justified. The procedure of the board was criticized by the committee as being unsound in method and disastrous in its results to the interests of the university. (See Bulletin of the American Association of University Professors, May, 1917.)

TWO STATE INSTITUTIONS ATTACKED.

THE MASSACHUSETTS AGRICULTURAL COLLEGE.

During October, 1916, the Massachusetts Agricultural College was criticized at a public hearing held by a commission appointed by the governor of the State to investigate the institution and to see whether its present policies should be continued. The college was charged with inefficiency because it did not turn out more practical farmers, and because it devoted more time than necessary to classical and humanistic studies, while neglecting the practical phases of farm life.

In answer to these objections President Butterfield and his supporters informed the commission that 65 per cent of the college graduates for the past 50 years were engaged in agricultural pursuits, the percentage having increased considerably during the past 10 years. About 80 per cent of the recent graduates are in agricultural vocations. The agricultural college aims to give a broad grasp of farm problems, combined with sufficient practical training. As to the relation between the humanistic and the agricultural subjects, the practice of the college is well stated in the published report of the commission, as follows:

The land-grant colleges were primarily established to promote the study of agriculture by the most advanced and scientific methods of instruction. In their courses of study one naturally expects that science will occupy the most prominent place, and that it should be taught by men well qualified for their work. The Massachusetts Agricultural College meets this expectation.

There are at present 228 courses in agriculture and the cognate sciences, and only 96 courses in mathematics and the so-called humanities. In the first year 48 courses are given in agriculture and mathematics, and only 18 in the humanities. In the second year 6 courses are required in the humanities, and 54 in agriculture and cognate sciences. After the second year a major course can be elected in one of the 17 departments; during the last year 75 per cent of the students elected major courses in agriculture and horticulture. There is no major course in the humanities, and only one-quarter of the students' time is required in these studies. Three-quarters of the students are giving three-fourths of their time to distinctively agricultural subjects. Ten times as many courses are given in junior and senior years in agriculture as were given 10 years ago, and more agricultural studies have been introduced in the first and second years than ever before.

There has been no corresponding increase in humanistic studies. Of the faculty, 54 teachers are engaged in instruction in agriculture and the cognate sciences, and 14 teachers in the humanities and mathematics. Members of the faculty and representative students alike testify that there is a prevailing tendency among the undergraduates to elect studies according to their supposed commercial values and to neglect those studies which aim to strengthen and cultivate the mind. While there is a fair showing of humanistic electives in the curriculum, most of them are not required, as they are in the Massachusetts Institute of Technology and in other colleges, and only a few of

the students elect them. Not only is there to be considered the number of courses, but account must be made of the order in which the courses are offered. The commission recommends that the college authorities consider readjustment of the courses so as to give larger place to practical work in the first two years; also certain courses, as, for example, that in rural journalism, might be carefully scrutinized to see whether they are really desirable and essential offerings of the college.

While the State in its acceptance of the provisions of the Morrill Act is bound to give special instruction in agriculture, it is no less bound by the language of the act to give a liberal education as an integral part of its distinctive work, and not to neglect or relegate to subordinate places those studies which experience has shown are best fitted to nourish and strengthen the faculties of the mind and which will enable men to do better work, whatever that work may be.

The college has been severely criticized because no larger proportion of its graduates become practical farmers, owing it is said to the lack of practical instruction which they receive. An examination of the curriculum shows that this criticism is no longer merited. Practical farm work is now given during the first two years, and is required of every student. Of the total hours assigned to instruction in the division of agriculture and horticulture, 32 per cent are given to classroom work, and 68 per cent to laboratory and field work. The field work should be considered as indispensable as is laboratory work in any science, so that students may apply practically the instruction which they receive theoretically. A summer session has also been recently introduced whereby such work can be carried on more readily. The lack of practical farmers, therefore, among the graduates does not appear to be due to a lack of practical work in agricultural instruction, and can be more readily explained from other causes.

Practical farmers the college does educate. They are found in all parts of the State, and are conducting farms which are profitable to themselves, and are profitable as object lessons.

ATTACK ON THE STATE UNIVERSITY OF TEXAS BY GOV. FERGUSON.

During the early part of the summer of 1917, a serious controversy arose between Gov. Ferguson, of Texas, and President Vinson, of the State university. The cause of the trouble was due largely to President Vinson's refusal to dismiss certain college teachers to whom the governor objected. The latter, by way of retaliation, vetoed the appropriation for the State university, and consequently aroused a great storm of protest from all parts of the State. Inasmuch as the governor had acted unlawfully in the matter, and seriously threatened the financial resources of the university, the legislature in special session passed the necessary appropriation bill for the support of the university.

In August the governor was impeached and removed from office. The articles of impeachment included counts for alleged misappropriation of funds and the abuse of authority in his dealings with the regents and the president of the university.

SPECIAL LEGISLATION TOUCHING HIGHER EDUCATION.

THE SMITH-HUGHES ACT.

By the enactment of the Smith-Hughes law, a large fund has been made available for the training of teachers in industrial and agricultural subjects. This fund, which is administered by the Federal Board for Vocational Education, amounts to \$546,000 for 1917-18 and increases yearly to a maximum of \$1,090,000 for the year of 1920-21, the latter sum being the annual appropriation thereafter.

The maximum amount of the teacher-training fund to be used in any fiscal year in any one of the three following lines—trades and industries, home economics, and agriculture—is 60 per cent of the total amount allotted to the State for that year for teacher training.

The training of these teachers will be directly under the State board for vocational education, subject to certain Federal regulations. In order to qualify for this special type of training, the teacher-candidate should be a graduate of a four-year high-school. Vocational experience is also required.

THE NEWLANDS BILL.

During the year 1916, Senator Newlands introduced a bill authorizing the appropriation of Federal funds for the establishment of engineering experiment stations in the different States. The bill provides that these stations are to be placed under a board of control, consisting of the Secretaries of the Interior, Commerce, and Agriculture. The approval of the governor of the State is necessary before an experiment station can be established in any State.

Although the bill did not obtain a vote, it has more than usual significance. It contemplates the subsidization of engineering research by a plan similar to that by which agricultural research is now subsidized in the agricultural experiment stations. The bill, furthermore, has the indorsement of the National Association of the State Universities and of other important educational bodies interested in engineering research.

AMERICANIZATION.

The new and important Americanization movement has necessitated the training of teachers to look after the large number of immigrants that annually come to our shores.

During the past year the New York Legislature has appropriated \$20,000 to provide for the training of teachers of adult immigrants, training courses being given during the summer of 1917, in Albany, Buffalo, New York, Rochester, Syracuse, and Nassau County, L. I. At present there are 14 universities and colleges conducting teacher

training classes for teachers of immigrants. These institutions are as follows: University of California; State Normal School, Los Angeles; University of Colorado; State Normal School, Danbury, Conn.; State Teachers' College, Greeley, Colo.; State Normal School, Hyannis, Mass.; American University, Springfield, Mass.; Columbia University and Teachers' College, New York; State College for Teachers, Albany, N. Y.; State Normal School, Buffalo, N. Y.; Syracuse University, Syracuse, N. Y.; University of Pittsburgh; University of Wyoming; University of Wisconsin.

Teacher training classes are also being conducted by various boards of Education, as in Hoboken, N. J., Detroit, Mich., Rochester, N. Y., Cincinnati, Cleveland, and Philadelphia.

PART II. THE COLLEGES AND THE WAR.

Universities and colleges have been temporarily transformed by the war. It is still too early to say whether any of the changes wrought will be permanent. Certain principles and methods, however, have been developed by the war experience which apparently commend themselves to large numbers of university and college officers. These are treated in some detail at the end of this chapter.

The contributions of the higher institutions to the war are definite and easily recorded. They are also noteworthy. Indeed, it is probable that no other class or group in the population of the United States contributed so large a proportion of its membership to the fighting forces of the country or participated so directly in the leadership of noncombatant war activities. It has often been remarked that the intellectual classes were responsible for the United States joining the Allies. The extent to which public opinion was molded by college officers and college students before the declaration of war is of course difficult to ascertain. It is beyond question, however, that the influence of collegiate communities upon public thought was very great. In spite of the consistent attempts of college officers to foster an open mind and to offer a free forum for discussion of the issues involved during the first three years of the World War, the trend of sentiment in college communities was from the beginning strongly in favor of the allied cause. Many presidents and professors also constituted themselves the spokesmen of this cause before the country. Reflections of the strength of student sentiment are to be found in the overwhelming support given to allied charities by collegiate communities. When the declaration of war came, it found the college world mentally prepared and eager to take its part in what it regarded as a great moral crusade.

PROBLEMS RAISED BY THE WAR.

It has been stated that the officers of higher institutions furnished a large part of the intellectual leadership in the actual conduct of the war. This leadership began to make itself felt at once. The colleges perceived at the outset the problems which they as institutions would have to meet. They perceived these problems in relation to the war enterprise as a whole. In fact, university and college officers seem to have been the only considerable group of individuals who did see in the beginning what were the fundamental human elements in preparation for war and in the successful prosecution of the war. Others, to be sure, grasped the need for deploying the Nation's material strength. The colleges saw first that this would be ineffective unless backed by the complete mobilization of the Nation's resources in knowledge and skill and intention. The colleges iterated and reiterated these truths until appropriate national policies were adopted. And the adoption came regrettably late. Both the successes and the failures of America's war experience demonstrate that the colleges were right.

War is an exceedingly practical business. Many have been surprised that college men, reputed to be a cloistered and unpractical lot, were able to lead in anything so concrete and matter-of-fact. But is it surprising? Besides being a practical business, war is also perennially a new business. Fighting is old, but every war is more modern than its age. The latest devices of science and invention are put to work. Under the tremendous mental tension of war, new devices are produced at a rate unknown in peace. It is the business of university and college instructors to follow the progress of the world in every field of intellectual endeavor. The open mind, adaptability to new conditions, are what they aim to produce in their students also. The double aspect of the present war has often been noted. On the one hand, it has been a war of science, of engineering, of medicine, of agriculture, of transportation; on the other hand, it has been a great moral struggle, in which two divergent concepts of human relationships have collided. University staffs contain men who are expert in each of the fields of science, and men also whose task it is to interpret the ethical aspects of every social movement. That these men should have read both the material and spiritual lessons developed in the three years of war in Europe, and should have sensed their import for the United States in 1917, is not to be wondered at. It would, in fact, have been surprising if they had not. At any rate they were more ready than any other group with suggestions for the practical solution of the difficulties which confronted the Government in April, 1917.

What were the concrete problems in which colleges and universities were primarily concerned and toward the solution of which they contributed? These were of a threefold nature. They related (a) to training and the proper organization of training agencies, (b) to the mobilization of science, and (c) to the development of public morale. These problems merged into one another to some extent. A consistent classification is not always possible. For the sake of convenience, however, the grouping that has been suggested will be used in the following discussion.

TRAINING AND THE EFFECTIVE ORGANIZATION OF TRAINING AGENCIES FOR NATIONAL SERVICE.

The declaration of war by the United States was not unforeseen in the university world. Several institutions immediately on the rupture of diplomatic relations made plans to meet the emergency which was certain to arise. Two especially noteworthy acts may be mentioned.

Columbia University developed a plan of registration and mobilization which would make possible the participation of any member or group of the faculty, alumni, or student body in the national service, with a minimum of delay. The very effective registration blanks devised by the university for this purpose were circulated with comment by the Bureau of Education among all the colleges. Many institutions adopted similar forms and organized in a similar way for service.

Harvard University, which had been conducting intensive military training for a number of months, approached the French Government for the assignment of invalided French officers to take charge of the instruction of the Harvard regiment. The preliminary negotiations were completed during February and March, 1917, and the officers arrived on the heels of the declaration of war.

With the actual declaration of war the exodus of students, chiefly from the upper classes, to enter the service as volunteers began. At the same time the presidents and boards of trustees of many institutions addressed the President, and Secretary of War, or the Commissioner of Education, offering the services of their plants and equipment to the Government. Back of these formal offers was a profound conviction that higher institutions had a uniquely valuable contribution to make, both as centers of training and as focal points for scientific experimentation. Presidents and faculties viewed the daily increasing enlistments of upper-class men with mixed feelings. On the one hand they were glad and proud of the response of the student bodies; on the other, they realized that if the scientific and technical training agencies were broken up and the supply of trained men diminished, the consequences would be very serious in the event

of a long war. It early became clear that, without checking the patriotic impulses of students, steps must be taken to retain a considerable percentage in college.

The colleges naturally looked for central direction. The conduct of the war was the business of the Government. The Government should say what colleges were expected to do. For a number of weeks no governmental direction was forthcoming. The Government's educational activities are distributed among some 20 separate departments and bureaus, no one of which was in a position to speak authoritatively to the institutions on a matter involving the military and economic policy of the Nation.

UNIVERSITY COMMITTEE OF THE ADVISORY COMMISSION OF THE COUNCIL
OF NATIONAL DEFENSE.

In the autumn of 1916 Congress had created the Council of National Defense. The council consists of the Secretaries of War, Navy, Interior, Agriculture, Commerce, and Labor. Associated with it is an advisory commission composed of seven civilians expert in the fields of transportation, munitions, supplies, raw materials, engineering, labor, and medicine. The function of the council is to investigate the resources of the country with a view to their utilization in the event of war. The members of the advisory commission associated with themselves committees of experts to assist in these investigations and in the formulation of policies to be recommended to the executive departments and to Congress. The council is therefore designed in part as a coordinating agency to relate the activities of the executive departments concerned in national defense and to bring to bear civilian opinion upon the problems of the Government. Education was not originally included in the sphere of the council's activities. Shortly after the declaration of war, however, the Commissioner for Engineering of the advisory commission was charged with the task of investigating and reporting upon educational problems related to the war.

The Commissioner for Engineering and Education therefore immediately appointed the nucleus of a committee on educational problems and called a meeting of representatives of the principal associations of colleges and universities, to formulate a comprehensive policy for cooperation between the higher institutions and the Government. The conference was held at Washington May 5. It was attended by the official representatives of the National Association of State Universities, the Association of American Agricultural Colleges and Experiment Stations, the Association of American Universities, the Association of American Colleges, the Society for the Promotion of Engineering Education, and by officers of 187 higher institutions. The following preamble and statement of principles

were adopted by the meeting. They indicate very clearly both the exalted spirit of service which animated the universities and colleges and the accuracy of their forecast of the educational needs of the country during the war.

PREAMBLE.

In the supreme crisis that confronts the Nation the colleges and universities of America have the single-minded thought and desire to summon to the country's service every resource at their command, to offer to the Nation their full strength without reservation, and to consecrate their every power to the high task of securing for all mankind those ideas and ideals that gave them birth and out of which have grown their most precious traditions.

In order that such service may be most intelligently developed and applied, the following declaration of principles is respectfully suggested.

STATEMENT OF PRINCIPLES.

It is our judgment that our colleges and universities should so organize their work that in all directions they may be of the greatest possible usefulness to the country in its present crisis.

We therefore believe, first, that all young men below the age of liability to the selective draft¹ and those not recommended for special service, who can avail themselves of the opportunities offered by our colleges, should be urged so to do in order that they may be able to render the most effective service, both during the full period of the war and in the trying times which will follow its close.

We believe, second, that all colleges and universities should so modify their calendars and curricula as will most fully subserve the present needs of the Nation and utilize most profitably the time of the students and the institutional plant, force, and equipment. With this end in view, we suggest that, as an emergency measure, the colleges consider the advisability of dividing the college year into four quarters of approximately 12 weeks each, and that, where necessary, courses be repeated at least once a year so that the college course may be best adapted to the needs of food production.

We believe, third, that in view of the supreme importance of applied science in the present war, students pursuing technical courses, such as medicine, agriculture, and engineering are rendering, or are to render, through the continuance of their training, services more valuable and efficient than if they were to enroll in military or naval service at once.

We believe, fourth, that the Government should provide or encourage military training for all young men in college by retired officers of the Army and National Guard or by other persons competent to give military instruction, and that the colleges should include as a part of their course of study teaching in military science, in accordance with the provisions of the national defense act of June, 1916.

We believe, fifth, that the Bureau of Education of the Department of the Interior and the States Relations Service of the Department of Agriculture, with the cooperation of the committee on science, engineering, and education of the advisory commission of the Council of National Defense, should be the medium of communication between the Federal departments and the higher educational institutions of the country.

¹ It will be recalled that the Selective Service Act was passed almost simultaneously with this meeting of May 5.

Finally, we believe that an educational responsibility rests on the institutions of higher learning to disseminate correct information concerning the issues involved in the war and to interpret its meaning.

The meeting was addressed by the Secretary of War. In the course of his remarks he made the following significant statements:

I think this, though, is more or less clear to those of us who look at it from the outside: First, that the country needs officers. There is no preference of college men for officers, but because a man has had academic opportunities he has to start with, presumptively at least, a better foundation upon which to build the learning which an officer must have; and therefore to a very substantial extent the country desires its college graduates and its college-bred men of suitable age in the training camps in order that they may be rapidly matured into officers and used in the training of the new forces.

To the extent that the men in college are physically disqualified, or to the extent that they are too young to meet the requirements of the department, it seems quite clear that in the present state of the emergency their major usefulness lies in remaining in the college, going forward with their academic work; and the colleges can, I think, lend some color of patriotic endeavor to their so doing by such simple modifications of their courses and curricula as will show the boys who stay that they are being directly equipped for subsequent usefulness if the emergency lasts until their call comes.

The meeting left behind it a permanent committee attached to the advisory commission of the Council of National Defense. The personnel of this committee follows:

Hollis Godfrey, Sc. D., member of the advisory commission of the Council of National Defense, president, Drexel Institute, chairman.

Henry E. Crampton, Ph. D., professor, Columbia University, vice chairman.

Frederick C. Ferry, Ph. D., dean, Williams College, secretary.

Samuel P. Capen, Ph. D., specialist in higher education in the United States Bureau of Education, executive secretary.

Edwin A. Alderman, LL. D., president, University of Virginia.

Guy Potter Benton, LL. D., president, University of Vermont.

Kenyon L. Butterfield, LL. D., president, Massachusetts Agricultural College.

Augustus S. Downing, LL. D., assistant commissioner for higher education, University of the State of New York.

Wilson Farrand, M. A., headmaster, Newark Academy.

Guy S. Ford, Ph. D., director of the division on Civic and educational co-operation of the Committee on Public Information.

Frank J. Goodnow, LL. D., president, Johns Hopkins University.

Edward K. Graham, LL. D., president, University of North Carolina.

Charles S. Howe, Ph. D., president, Case School of Applied Science.

Harry Pratt Judson, LL. D., President, University of Chicago.

A. Lawrence Lowell, LL. D., president, Harvard University.

Frank L. McVey, LL. D., president, State University of North Dakota.

Alexander Meikeljohn, LL. D., president, Amherst College.

Joseph A. Mulry, Ph. D., president, Fordham University.

John S. Nollen, LL. D., president, Lake Forest College.

Raymond A. Pearson, LL. D., president, Iowa State College of Agriculture and Mechanic Arts.

Winthrop E. Stone, LL. D., president, Purdue University.

Henry Suzzallo, Ph. D., president, University of Washington.

William O. Thompson, LL. D., president, Ohio State University.

Robert E. Vinson, LL. D., president, University of Texas.

With recognition of education by the Council of National Defense and the establishment of this committee, higher institutions believed that they had at last located the Government agency which was prepared to give them competent and authoritative direction. Their expectations were only in part fulfilled. The Council of National Defense is not an executive, but purely an advisory body. During the war, moreover, it was equipped with such small financial resources that its facilities even for educational investigation were limited. However, through the agency of the university committee and the committee on the relation of engineering schools to the Government, mentioned below, it was able to bring to the attention of the operating departments some of the major problems of the colleges and to assist in the development of an effective national policy for the utilization of these training facilities.

INDEPENDENT ACTION BY COLLEGES IN PREPARATION FOR WAR SERVICE.

MILITARY TRAINING.

The statement of principles just quoted received wide circulation among colleges and exercised a steadying effect. A large percentage of the institutions acted upon the advice contained in this statement. The one activity of foremost importance, as it seemed, in which college students could engage at once was military training. Almost without exception the colleges provided military training. In many cases a large amount of time was devoted to it each week, and academic credit given. Under the national-defense act of June 2, 1916, the establishment of units of the Reserve Officers' Training Corps in all colleges mustering 100 able-bodied male students for the purpose was authorized. Up to the outbreak of hostilities something less than a hundred units of the corps had been established. The great pressure upon the War Department for officers, rifles, and other equipment prevented the extension of the corps (except to the institutions that had already been promised units) during the war. As this was the only form of military training under Government supervision and receiving Government recognition, colleges which did not have the Reserve Officers' Training Corps were obliged to provide such training on their own responsibility. Retired officers of the Regular Army and National Guard were hired as instructors, as far as they were available. Some institutions secured invalided officers of the allied armies. Military training thus made great progress in the spring of 1917. By the opening of the fall term the provision of military training was recognized as the *sine qua non* of a college's existence.

The opinion of American college officers with respect to the desirability of the general introduction of military training was reinforced by the testimony of representatives of Canadian universities. The university committee of the Council of National Defense held a conference with representatives of Canadian universities on July 3 and 4, 1917. The following gentlemen represented the Canadian universities:

Sir Robert A. Falconer, president of the University of Toronto.

Dr. A. Stanley Mackenzie, president of Dalhousie University.

Dr. H. M. Tory, president of the University of Alberta.

Dr. Frank D. Adams, dean of the faculty of applied science, McGill University.

Capt. William H. Alexander, University of Alberta.

These gentlemen reported the establishment in Canada early in the war of officers' training corps in the universities, the training constituting a part of the regular university work for a period of two years. The training was limited to two years because few physically fit upper classmen remained in Canadian universities. Students in arts courses proved excellent candidates for commissions in the Army after having received this training. Officers' training corps units were parts of the militia of the Dominion of Canada. The instruction was regularly given by members of the teaching force of the universities, because it had been found in general that university teachers proved more effective instructors for university men than Army officers.

The results of this conference were reported both to the colleges and to the War Department. The War Department expressed its conviction of the soundness of the contention of college officers that students should be given regular military instruction under the auspices of the department, but regretted that the shortage of men and material prevented the adoption of this policy at once.

SPECIAL COURSES FOR REGULAR STUDENTS INTRODUCED AS A RESULT OF THE WAR.

Before the end of the academic year 1916-17 the majority of institutions had introduced a variety of special emergency courses. The great problem of conservation, especially the conservation of food, received attention not only in agricultural colleges but in colleges of arts and sciences, and especially in colleges for women. Nearly every college with women students offered Red Cross work or home nursing, or both. Engineering schools inaugurated courses in such military applications of engineering subjects as map making, military surveying, bridge building, telegraphy, radio operation, etc. Courses in spoken French and courses in economics, government, and history, designed to illuminate the background and causes of the war, were introduced in a number of institutions.

NEW SCHOOLS AND COURSES.

As early as the spring of 1917 the various branches of the military departments began to recognize the contributions to training for special service which could be made by the organized civilian institutions. The Signal Corps established eight aviation schools in connection with universities. The Quartermaster's and Ordnance Departments contracted with colleges for the provision of storekeepers' courses. The Navy trained ensigns and technical specialists at several large universities lying near the coast. Each of these types of training was managed by the branch of the service in which the candidates were to serve. As yet neither the Army nor the Navy was prepared to develop a comprehensive policy of cooperation with the colleges in the work of training.

CHANGES IN COLLEGE CALENDARS.

A considerable number of institutions adopted the suggestion made in the statement of principles quoted above and reiterated by the Secretary of War regarding the modification of college calendars. The four-quarter year had been debated in educational meetings for a long time. Few institutions had found themselves able to adopt it. The principal obstacle was a financial one, although there were others also. In the enthusiasm of the first months of the war a considerable number of institutions made this change and accepted the financial loss which it entailed as a part of their contribution to the national service.

STUDENTS AND THE DRAFT.

Reference has already been made to the serious military consequences involved in the withdrawal of a large percentage of students undergoing general and technical training before the completion of their courses. The experience of the allied countries in this regard pointed an unmistakable lesson. In the beginning of the war Great Britain and Canada allowed hundreds of scientific experts to go to the trenches as privates or officers of the line. Their higher institutions were decimated. Later, when imperative demand for the peculiar services of these technically trained men came, the men were no longer available. The supply ordinarily furnished by the higher institutions had also been temporarily cut off. Both Great Britain and Canada realized that their failure to use technical men in technical service and to keep a constant flow of scientifically trained students and men of advanced general education issuing from their institutions was a mistake. Military and industrial advisers from both countries warned the United States in the early days of our participation in the war not to repeat this error.

The activities of the medical section of the Council of National Defense were responsible for the protection of medical and dental

students from the draft by special legislation at the time of the passage of the selective-service law. But no similar measures were taken to defer the military service of students in other technical lines and in colleges of arts and sciences. The reason was evidently twofold. In the first place, few people realized that there was danger of serious shortage either of engineers or of arts-college graduates. In the second place, it was regarded as unwise public policy to protect from military service a class of persons which was enjoying already special advantages. The draft must appear absolutely democratic in its operation; otherwise it could not command the support and confidence of the entire country. College officers appreciated the cogency of this argument. They were reluctant to put themselves in a position of asking special favors. Particularly did they hesitate because their motives might seem open to suspicion, a shortage of students having a depressing effect upon the financial status of their institutions.

The draining of the trained and educated resources of the country came not alone from the operation of the draft. College and university students were among the first to volunteer. Until enlistments were entirely barred, colleges were the happy hunting grounds for recruiting officers of every branch of the military service. The sentiment grew that to wait for the draft was the mark of a slacker. College officers were therefore faced with an exceedingly difficult and delicate problem. It would have been disastrous for the morale of the institutions to discountenance volunteering. Without taking this step, the arguments in favor of delay and of a wise, long-distance patriotism were not very effective.

The way in which educational leaders and other public men went about solving the difficulty is of special interest. Indeed, one of the striking aspects of America's first year in the war is the long series of efforts to conserve the supply of men of higher training and to render the selective-service law truly selective in its operation. The history of these efforts is worth recording briefly.

The first public pronouncement appeared in the statement of principles adopted at the meeting of May 5, quoted above. This was followed by a circular issued May 22 by the Commissioner of Education, entitled "Suggestions for the conduct of educational institutions during the continuance of the war, to the end that their educational efficiency may not be lowered and that they may render the largest amount of service both for the present and for the future." In the section addressed to colleges, universities, and technical schools the commissioner made the following statement:

All students should be made to understand that it is their duty to give to their country and to the world the best and fullest possible measure of service, and that both will need more than they will get of that high type of service

which only men and women of the best education and training can give. Patriotism and the desire to serve humanity may require of these young men and women the exercise of that very high type of self-restraint that will keep them to their tasks of preparation until the time comes when they can render service which can not be rendered by others.

On July 19 the Secretary of the Interior brought to the attention of the President the serious falling off in the number of students in higher institutions. The President replied on July 20, as follows:

MY DEAR MR. SECRETARY: The question which you have brought to my attention is of the very greatest moment. It would, as you suggest, seriously impair America's prospects of success in this war if the supply of highly trained men were unnecessarily diminished. There will be need for a larger number of persons expert in the various fields of applied science than ever before. Such persons will be needed both during the war and after its close. I therefore have no hesitation in urging colleges and technical schools to endeavor to maintain their courses as far as possible on the usual basis. There will be many young men from these institutions who will serve in the armed forces of the country. Those who fall below the age of selective conscription and who do not enlist may feel that by pursuing their courses with earnestness and diligence they also are preparing themselves for valuable service to the Nation. I would particularly urge upon the young people who are leaving our high schools that as many of them as can do so avail themselves this year of the opportunities offered by the colleges and technical schools, to the end that the country may not lack an adequate supply of trained men and women.

Cordially and sincerely, yours,

WOODROW WILSON.

In spite of this advice and similar counsel from many other influential persons all over the country, the exodus from higher institutions continued. The actual effect of the war on student enrollment at the beginning of the academic year 1917-18 is shown in the following tables compiled by the Bureau of Education from a questionnaire issued October 1, 1917:

Effect of the war on 313 colleges of liberal arts.

Classes.	Fall of 1916.	Fall of 1917.	Gain or loss.		Per cent.	
			Gain.	Loss.	Gain.	Loss.
Freshman class:						
Men.....	22,531	18,800		3,671		16.3
Women.....	17,442	17,556	114		0.6	
Sophomore class:						
Men.....	14,613	12,505		2,113		14.4
Women.....	11,613	11,882	269		2.3	
Junior class:						
Men.....	10,692	8,157		2,535		23.7
Women.....	8,961	9,911	130		1.4	
Senior class:						
Men.....	8,712	6,149		2,563		29.4
Women.....	7,265	7,897	611		8.4	
Special and graduate students:						
Men.....	4,043	2,419		1,624		40.1
Women.....	3,273	2,919		354		10.8
Total men.....	60,596	48,090		12,506		20.6
Total women.....	46,575	49,345	770		1.6	
Total students.....	109,171	97,435		11,736		10.8

Effect of the war on student enrollment in technical institutions.

Colleges.	Number reporting.	Enrollment by sex.		Increase (+) or decrease (-).		Total enrollment.		Increase (+) or decrease (-).	
		Sex.		1916	1917	Number.	Per cent.	1916	1917
Colleges of agriculture.....	38	Men.....	11,799	7,680	-4,119	-34.9	11,799	7,680	-4,119
Colleges and schools of engineering.....	94	Men.....	25,902	21,048	-4,754	-18.4	25,902	21,048	-4,754
Colleges and schools of mines.....	18	Women.....	24	30	+	+25.0	24	30	+
Colleges and schools of education.....	86	Men.....	1,684	1,175	-409	-25.0	1,684	1,175	-409
		Women.....	1,432	989	-443	-30.9	1,432	989	-443
		Sex not reported.....	5,350	6,166	+	+3.4	5,350	6,166	+
		Men.....	3,096	3,352	+	+3.3	3,096	3,352	+
		Women.....	5,472	6,652	+	+18.3	5,472	6,652	+
Schools of medicine.....	48	Sex not reported.....	186	220	+	+34	186	220	+
		Men.....	671	649	-22	-3.3	671	649	-22
		Women.....	1,176	824	-352	-29.9	1,176	824	-352
Colleges and schools of architecture.....	13	Men.....	20	23	+	+15.0	20	23	+
		Women.....	8,342	4,994	-3,348	-40.1	8,342	4,994	-3,348
Schools of law.....	28	Men.....	131	160	+	+22.1	131	160	+
		Women.....	1,186	549	-637	-53.7	1,186	549	-637
		Sex not reported.....	3,982	3,157	-825	-20.8	3,982	3,157	-825
Colleges of dentistry.....	15	Men.....	72	68	-4	-5.6	72	68	-4
		Women.....	48	39	-9	-18.8	48	39	-9
		Sex not reported.....	1,187	870	-317	-26.7	1,187	870	-317
Colleges and schools of theology.....	26	Men.....	57	34	-23	-40.4	57	34	-23
		Women.....	273	223	-50	-18.3	273	223	-50
		Sex not reported.....	525	348	-177	-33.7	525	348	-177
Colleges of veterinary medicine.....	8	Men.....	1,270	988	-282	-22.2	1,270	988	-282
		Women.....	117	172	+	+47.0	117	172	+
Colleges of pharmacy.....	25	Men.....	778	747	-31	-3.9	778	747	-31
		Women.....	2,768	2,675	-93	-3.4	2,768	2,675	-93
Colleges of home economics ¹	26	Men.....	4,060	3,458	-602	-15.2	4,060	3,458	-602
		Women.....	420	581	+	+38.3	420	581	+
Schools of commerce or business administration.....	27	Sex not reported.....	519	430	-89	-17.0	519	430	-89
		Men.....	342	177	-165	-48.3	342	177	-165
Colleges and schools of journalism.....	6	Women.....	78	98	+	+25.7	78	98	+
Colleges of forestry.....	6	Men.....	484	286	-198	-40.9	484	286	-198

¹ Including women in colleges of agriculture.

Other figures compiled by the Bureau of Education during the summer of 1917 with regard to the total available supply of engineers and engineering students, revealed a particularly serious situation with respect to this group of persons. It became evident that the only hope of a satisfactory solution of the difficulty lay in action by the War Department, giving a special military status to engineering students. The university committee of the Council of National Defense, therefore, brought the facts in its possession to the attention of the following bodies: The Association of American Universities, the Association of American Agricultural Colleges and Experiment Stations, the National Research Council, the Society for the Promotion of Engineering Education, the Council of the American Society of Civil Engineers, the Council of the American Society of Mechanical Engineers, and the Council of the United Engineering Societies. Most of these agencies memorialized the Secretary of War, urging in effect that engineering students be placed upon the same military status as students in medicine.

On December 8 the Secretary of War authorized the issuance of regulations which permitted students in schools of engineering to finish their courses before being called upon for active military service. This ruling was embodied in the Revised Selective Service Regulations and read as follows:

Under such regulations as the Chief of Engineers may prescribe, a proportion of the students pursuing an engineering course in one of the approved technical engineering schools listed in the War Department as named by the school faculty may enlist in the Enlisted Reserve Corps of the Engineering Department and thereafter, upon presentation by the registrant to his local board of a certificate of enlistment, such certificate shall be filed with the questionnaire and the registrant shall be placed in Class V, on the ground that he is in the military service of the United States.

The status of engineering students thus established persisted until the abolition of the Enlisted Reserve Corps in 1918, and the establishment of the Students Army Training Corps. By later regulation of the Secretary of War, students in applied sciences were also allowed to enter the Enlisted Reserve Corps of the Quartermaster's Department, the Signal Corps, and the Ordnance Department.

FURTHER EFFORTS TO SECURE FEDERAL DIRECTION OF CIVILIAN TRAINING AGENCIES.

The measures just mentioned resulted in only a partial and inadequate utilization of college resources in the great task of training for war service. They did not furnish the colleges with the authoritative and intelligent direction which was necessary. Neither were they sufficiently definite and drastic to conserve the supply of experts and of officer material. The colleges recognized these defects. From

May, 1917, to February, 1918, a series of efforts were made to induce the Government to coordinate civilian training agencies and to carry out through them a training program appropriate to the immediate needs of the Nation. Since Congress had placed in the hands of the War Department the destinies of young men of college age, it was clear that the responsibility for such coordination rested in the first instance with that department. In fact, the cause of most of the difficulties which colleges faced was the lack of any agency in the War Department itself to consider the question of training in a comprehensive way and to make use of the vast training facilities afforded by civilian institutions. Whatever the opinion of the Secretary of War and the heads of the staff corps with regard to the greater serviceableness of men who had finished their technical training, the inexorable machinery of the selective-service law nevertheless operated to drive technical students as well as others into the Army prematurely. Numerous plans were proposed to the War Department both by individuals and by educational associations looking toward the establishment of such an agency. Indeed, the full utilization of the civilian educational plant by the Government was the principal topic of discussion at nearly every higher educational gathering during this period.

Limitations of space do not permit the complete enumeration of these efforts. The cumulative effect was doubtless influential in securing the action eventually taken. Naturally the governmental agencies for education, especially the educational committees of the Council of National Defense and the Bureau of Education, were in a strategical position to reinforce these efforts and to exert a constant pressure toward the same end. In fact, these two bodies served as foci through which the opinions of the leaders in the university world were brought to bear upon the persons in charge of training for military operations. This whole movement can therefore best be followed by recording the acts of the two bodies mentioned.

COMMITTEE ON THE RELATION OF ENGINEERING SCHOOLS TO THE GOVERNMENT.

In July, 1917, the Commissioner for Engineering and Education of the Advisory Commission of the Council of National Defense appointed a committee to study the relation of engineering schools to the Government, this committee functioning as a subcommittee of the university committee noted above. Its members were Dean F. L. Bishop, of the Engineering School of the University of Pittsburgh (chairman); Dr. S. P. Capen, of the United States Bureau of Education (secretary); President C. S. Howe, of the Case School of Applied

Science; Dean M. S. Ketchum, of the College of Engineering at the University of Colorado; Dr. C. R. Mann, special investigator for the Carnegie Foundation for the Advancement of Teaching.

Throughout the month of August the committee was in nearly continuous session. It held occasional meetings also up to January, 1918. It was throughout its lifetime in touch with the Society for the Promotion of Engineering Education, the National Engineering Societies, the Association of American Universities, the Association of American Agricultural Colleges and Experiment Stations, and the National Association of State Universities.

The committee's first task was to consult with the heads of various bureaus, divisions, and departments of the Department of War and the Department of the Navy, with regard to the probable needs for scientific and technically trained men in connection with the military operations. The mobilization plans for the Army were not then complete. It was, in fact, impossible to tell either how many specially trained experts would be needed or what relation the probable demand for such persons bore to the available supply among the civilian population. Army authorities were not even certain of the proportionate number of specially trained individuals needed in each type of military unit. Convinced of the urgency of securing this information and relating it to a definite program for the use of educational institutions, the committee presented to the Secretary of War, on August 17, 1917, the following recommendation: "That an engineer familiar with the equipment and capacity of the higher technical institutions of the country be commissioned in the Army and assigned to the task of coordinating the needs of the Army for technically trained men with existing educational facilities." On August 31 the Secretary of War detailed an officer of the General Staff to study the needs of the War Department for technically trained men and the methods of securing the cooperation of educational institutions toward meeting these needs. The committee at once entered into a series of conferences with this officer which led to the formulation of certain unexpected conclusions.

It appeared that far greater than the need for highly trained experts was the need for men with lower grades of technical skill. It was the original assumption that a sufficient number of persons qualified to serve the Army as carpenters, automobile mechanics, electricians, blacksmiths, etc., might be secured from the civilian population by means of the selective-service law. Indeed, it was at first thought that sufficient numbers of artisans and technicians would turn up in the ordinary process of the draft to meet these needs. In the summer of 1917 the committee on classification of personnel in the Army began to prepare a census of the drafted

men with reference to their previous occupations, experience, and education. The committee had not completed its work before it became apparent that the draft was failing by a very large per cent to bring into the service the technicians required for ordinary military operations. Indeed, the calls for specialists from the American Expeditionary Force were operating to strip the units in home camps of the skilled personnel absolutely essential to the effective maintenance of these units. Moreover, the increasing pressure upon technical industries for the production of war materials rendered it unwise to draft larger numbers of technically trained men. It was clear, therefore, that emergency training devices must at once be established, if the Army program were to be a success.

The General Staff officer assigned to the study of this problem and the committee on the relation of engineering schools to the Government worked out a tentative plan for the creation of machinery in the War Department which should supervise the training of both the lower and higher grades of technical experts and should enlist the cooperation of civilian institutions in the task of training.

With the relief of this officer and the assignment of another to the same task, the tentative plan was temporarily shelved. The Federal Board for Vocational Education, which had been established in July, 1917, offered its services to the General Staff for the training of technicians and trade specialists for the Army. The Adjutant General, therefore, issued an order on November 15, 1917, directing the heads of the staff corps to apply to the Federal Board for the numbers of technically trained men needed by each corps. The Federal Board established at once emergency courses in several of the Army occupations for the training of men awaiting the draft. These measures served as only a partial remedy for the difficulty. Their principal defect lay in the fact that the Federal Board had no means of controlling the numbers of men in training. It was also handicapped in administering an extensive training program, owing to the fact that most of the men in its courses were following their regular occupations. It was evident that no accurate correlation of training with the Army needs could be secured without a change of policy.

The Federal Board for Vocational Education consequently brought together the representatives of secondary and higher technical training at two conferences in Washington, and secured their indorsement for a proposal to the Secretary of War substantially similar to that made by the committee on the relation of engineering schools to the Government. The principal feature of both plans was that the War Department should create a special board or committee to have charge of the Army training enterprise other than military, and

should rely upon civilian institutions for the provision of training facilities.

EMERGENCY (AMERICAN) COUNCIL ON EDUCATION.

College and university officers had been growing more and more impatient at the delay in the formulation of the Government policy toward higher institutions. The feeling that there should be at the seat of the Government an independent body without governmental connections which could present the views and the situation of the colleges, gradually crystallized at meetings of the Association of American Colleges and the National Association of State Universities held in Chicago in January, 1918. Delegates from these associations, from the Association of Urban Universities, the Catholic Educational Association, the American Association of University Professors, the Society for the Promotion of Engineering Education, the Association of American Medical Colleges, and the various branches of the National Education Association met in Washington during the last week in January, under the chairmanship of the specialist in higher education in the Bureau of Education. The meeting resulted in the formation of the Emergency Council on Education, the declared purpose of which was:

To place the educational resources of the country more completely at the service of the National Government and its departments, to the end that through an understanding cooperation:

The patriotic services of the public schools, professional schools, and colleges and universities may be augmented;

A continuous supply of educated men may be maintained; and

Greater effectiveness in meeting educational problems arising during and following the war may be secured.

The Emergency Council elected the following officers:

President Donald J. Cowling, Carleton College, president.

President P. L. Campbell, University of Oregon, secretary.

Dr. Robert L. Kelly, executive secretary.

Executive council.

The president and secretary.

Dean Herman V. Ames, of the University of Pennsylvania.

President Homer H. Seerley, Iowa State Teachers' College.

Right Rev. Thomas J. Shahan, Catholic University of America.

The council changed its name after the first meeting to the American Council on Education. It established headquarters in Washington, and through the active efforts of its executive officers it served as a valuable mediating agent between the Government departments, particularly the War Department, and educational institutions. It interpreted the measures later adopted by the War Department to the colleges. It was especially effective in keeping the operating departments constantly informed of the views and desires of the educational leaders of the country.

COMMITTEE ON EDUCATION AND SPECIAL TRAINING OF THE WAR DEPARTMENT.

The preceding discussion has shown the development of a strong body of opinion, both inside and outside the War Department, as to the necessity for formal action by the department in the matter of its educational program. The Secretary of War and his advisers had before them in the latter part of January the plans suggested by various individuals, by several educational associations, by the committee on the relation of engineering schools of the Council of National Defense, and by the Federal Board for Vocational Education. All were in agreement as to the fundamental ends to be attained. There were indeed only minor differences in the various solutions proposed. On the 10th of February, 1918, the Secretary of War created the committee on education and special training. The order authorizing this committee and defining its functions follows:

1. There is hereby created within the War Department the committee on education and special training. This committee of three members shall consist of Col. Hugh S. Johnson, Deputy Provost Marshal General; Lieut. Col. Robert I. Rees, General Staff, and Maj. Grenville Clark, Adjutant General's Department.

2. Under the direction of the Chief of Staff, the functions of the committee shall be: To study the needs of the various branches of the service for skilled men and technicians; to determine how such needs shall be met, whether by selective draft, special training in educational institutions, or otherwise; to secure the cooperation of the educational institutions of the country and to represent the War Department in its relations with such institutions; to administer such plan of special training in colleges and schools as may be adopted.

3. The committee on education and special training shall have associated with it an advisory civilian board appointed by the Secretary of War, composed of representatives of educational institutions. An officer shall be detailed by the chief of each staff corps and department to consult with the committee concerning the needs of his corps or department.

4. The committee will be given such assistance, commissioned and civilian, as may be necessary to fully execute its duties, with office room in the War Department Building.

The Secretary of War appointed the following gentlemen to serve as members of the advisory board, representing civilian educational interests:

Dr. C. R. Mann, of the Carnegie Foundation for the Advancement of Teaching, representing engineering education (chairman).

Dean James R. Angell, of the University of Chicago, representing university education.

Mr. J. W. Dietz, educational manager of the Western Electric Co., representing vocational education.

Mr. J. P. Monroe, member of the Federal Board for Vocational Education.

Dr. S. P. Capen, specialist in higher education in the Bureau of Education.

Later President R. A. Pearson, of Iowa State College, was appointed to represent agricultural education, and Mr. Hugh Frayne to represent labor interests. On the resignation of Mr. Monroe, his place was filled by Dean Herman Schneider, of the engineering school of the University of Cincinnati.

NATIONAL ARMY TRAINING DETACHMENTS.

Immediately upon its organization the committee and its advisory board proceeded to secure estimates from the staff corps as to the needs of the different branches of the Army for technically trained men. These needs were calculated as accurately as possible and compared with the estimated number of practitioners of various trades that could be expected from the operation of the draft. It appeared that there would be a shortage of approximately 100,000 mechanics by September 1, unless special training courses were set in operation. The committee regarded the provision of these 100,000 mechanics as its first task.

Ordinarily the trade schools and technical high schools would have been enlisted to provide the necessary training. The character of the present emergency, however, made this course of procedure impractical. The committee was engaged in training soldiers. The men over whom it had jurisdiction were already enrolled in the Army, either by voluntary induction or draft. They must therefore be under military discipline and control while receiving their technical training. To insure the effectiveness of this control, they must be housed and fed under military conditions. It was not sufficient that adequate training facilities should be provided by institutions which undertook to train these men. Living quarters and a common mess were likewise essential. Moreover, the requirements of the Army service demanded that all technical specialists should have had contact with practical operations identical with those which they would have to perform with the military forces.

Few trade schools and technical high schools possessed either the housing facilities or the large shops necessary to meet these conditions. The committee therefore turned first to the engineering schools of the country, in the belief that they would be willing to depart from their usual procedure to the extent of accepting and training these groups of tradesmen. With very few exceptions, the engineering schools enthusiastically volunteered for the task. Altogether the committee established 147 training centers for technicians. Of these, 123 were at engineering schools. Some 47 of the principal Army occupations were taught. By April 1 the first 6,000 men were under instruction. At the time of the signing of the armistice 130,000 had been trained; 92,000 had been assigned to military units;

and more than 70,000 had been sent to France. The General Staff had authorized the committee to train 220,000 more before the summer of 1919.

Certain brief comments on the principles underlying the training of these technicians in the so-called National Army Training Detachments and the methods employed may be in order. It was necessary that the training should be brief and intensive. If the requisite number of men were to be produced by the autumn of 1918, the training courses could not exceed two months in length (except for a few trades in which the numbers were small). At the outset it seemed absurd to suppose that inexperienced men could be taught a mechanical vocation in two months. But, to the surprise of the committee and of the school officers, the majority turned out to be competent mechanics on the completion of the courses. In fact, the reports of the officers of active field units to which they were assigned for special duty showed that they were entirely satisfactory and that they saved the situation.

The reasons for this unexpected and truly extraordinary result are not far to seek. They may be summarized under three heads: (a) Adequate motivation, (b) an intensive and practical method, and (c) Army discipline.

(a) The experience of the committee, like that of other war-training agencies, appears to demonstrate that the educational processes of peace have used but a portion of the individual's capacity. They have not supplied a compelling motive. With a motive and a method of instruction which is at once practical and interesting, the progress of the learner in any practical pursuit is astonishing. In these courses for technicians the motive for a supreme effort on the part of the student soldier was of course patent. Every man expected that proficiency in the trade which he was learning would improve his military status. Nearly every man also was animated by a high spirit of patriotism.

(b) The training methods were as practical as possible. A theoretical or scientific background was not regarded as important. The vital object was to inculcate a knowledge of the job and to develop resourcefulness. Men were consequently put to work at once on practical industrial problems. Automobile mechanics were set to taking down and re-assembling cars; carpenters were given simple building to do. The necessary theory was interwoven with this practical work in greater or less measure. The committee's guide, however, was not any preconception of the pedagogical advantages of one or another mode of presentation. It was rather the specific definition of the job each specialist would have to perform as a member of an Army unit. Because the courses were established on short notice, it was impossible to formulate teaching material to

help the schools. School officers were therefore given the definition of the finished product. For example, a tire repairer would have such and such specific things to do. The committee furnished the men and a statement of the goal; it left the school officers to work out the method whereby the goal might be reached, insisting only upon a maximum amount of actual practice. This resulted in the development of a multiplicity of teaching devices and a wholesome pedagogical rivalry among the different institutions.

(c) The whole training enterprise was galvanized and systematized by military discipline. Moreover, all the men in training were under military instruction for several hours a day, and were consequently in splendid physical condition.

Although the vocational training in the National Army Training Detachments, as they were called, was not higher education, a discussion of it properly belongs in this section, both because it represents an educational contribution made by higher institutions and because of its influence upon the normal educational processes of many institutions. The inclusion of a group of men devoting themselves to a less advanced grade of technical training was, in the beginning, regarded with disfavor and alarm by college officers. After eight months' experience, many of these same officers came to two unexpected conclusions, namely, (1) that the methods employed in the vocational courses might profitably be applied to some extent in the higher grades of professional training, and (2) that the presence of a body of men engaged in practical processes, with an immediate vocational goal in view, strengthens rather than weakens the academic morale.

There is still another aspect of the training offered the National Army Training Detachments which bids fair to have lasting influence, not only on vocational training, but on higher education. It was noted above that the men under special training in these detachments were considered by the Army primarily as soldiers. An ideal soldier, from the point of view of the General Staff, is a resourceful, adaptable man, with initiative and conviction of the righteousness of his cause. The narrowly trained specialist may fail to be a successful soldier. From the beginning, therefore, the committee held that other elements than purely trade instruction should be included in the training. It sought to solve the problem by introducing weekly discussions on the war aims of the United States. These discussions were designed to cover the historical background of the war, the economic and social development, and the types of government of the belligerent countries; and to acquaint the soldier with the expression of different national purposes and philosophies, as these have found their way into literature. No attempt was made to

create official propaganda. The discussions were intended rather to assist soldiers to answer the questions which naturally arose in their own minds. This war-aims course later developed into the war-issues course for the Students Army Training Corps.

THE STUDENTS' ARMY TRAINING CORPS.

Having inaugurated the units of the National Army Training Detachments, the committee and its advisory board proceeded to study the more complicated question of the proper development of the potential officer material contained in colleges and universities. The committee was convinced that the measures already taken to enroll technical students in the Enlisted Reserve Corps were a wholly inadequate solution of the problem. The majority of the students were not satisfied with this status and could not be convinced that they were serving their country in the most useful manner by entering the Enlisted Reserve Corps. Something more definite was demanded, not merely to preserve the supply of prospective technical specialists, but to keep the colleges from being stripped of students. Such a result would have been very unfortunate, from a military as well as an educational point of view, in the event of a long war. The solution which the committee proposed was finally embodied in a letter addressed by the Secretary of War to presidents of colleges, on May 6, 1918:

In order to provide military instruction for the college students of the country during the present emergency, a comprehensive plan will be put in effect by the War Department, beginning with the next college year, in September, 1918. The details remain to be worked out, but in general the plan will be as follows:

Military instruction under officers and noncommissioned officers of the Army will be provided in every institution of college grade which enrolls for the instruction 100 or more able-bodied students over the age of 18. The necessary military equipment will, so far as possible, be provided by the Government. There will be created a military training unit in each institution. Enlistment will be purely voluntary, but all students over the age of 18 will be encouraged to enlist. The enlistment will constitute the student a member of the Army of the United States, liable to active duty at the call of the President. It will, however, be the policy of the Government not to call the members of the training units to active duty until they have reached the age of 21, unless urgent military necessity compels an earlier call. Students under 18 and therefore not legally eligible for enlistment, will be encouraged to enroll in the training units. Provision will be made for coordinating the Reserve Officers' Training Corps system, which exists in about one-third of the collegiate institutions, with this broader plan.

This new policy aims to accomplish a twofold object: First, to develop as a great military asset the large body of young men in the colleges; and second, to prevent unnecessary and wasteful depletion of the colleges through indiscriminate volunteering, by offering to the students a definite and immediate military status.

Later announcement will be made of the details of the new system. In the meantime, presidents of collegiate institutions are requested to call this matter to the attention of all their students. Those who do not graduate this spring should be urged to continue their education and take advantage of this new opportunity to serve the Nation.

This letter was the first announcement of the Students' Army Training Corps. It was followed by a more definite and detailed statement in the latter part of June. It was the original intention of the War Department to interfere as little as possible with the freedom and independence of colleges. While providing facilities for military training and furnishing young men a strong incentive to attend college, the department expected to leave full liberty of action to college officers, in the development of courses and in the conduct of the institutions. Plans were made during the summer by the committee to put the Students' Army Training Corps into operation on this basis. The committee also indorsed a campaign for collegiate enrollments, which was undertaken by the American Council on Education and the Bureau of Education.

While these arrangements were being made, the military situation changed. It became imperative to deploy America's forces on a vastly greater scale. On recommendation of the Secretary of War and the Chief of Staff, therefore, Congress passed the man-power bill August 30. This action necessitated two radical modifications of the Students' Army Training Corps plan. First, there was no possibility of keeping a large number of men in college for two or three years prior to their attainment of draft age. The new draft ages were from 18 to 45. Second, a very greatly increased number of officers were demanded for the new armies of the autumn of 1918 and the spring of 1919. The central officers' schools could not be relied upon to furnish all of these. Colleges must be regarded as one of the principal sources of officer material.

Authorization for the creation of the Students' Army Training Corps as an active military unit was therefore secured from the President, and the following General Orders No. 79 issued on August 24, 1918:

Under the authority conferred by sections 1, 2, 8, and 9 of the act of Congress authorizing the President to increase temporarily the Military Establishment of the United States, approved May 18, 1917, the President directs that for the period of the existing emergency there shall be raised and maintained by voluntary induction and draft a Students' Army Training Corps. Units of this corps will be authorized by the Secretary of War at educational institutions that meet the requirements laid down in the regulations.

The fundamental difference between the student soldier under the first plan for the Students' Army Training Corps and the member of that corps under the revised plan was that now he became a soldier on active duty. This meant that he must be constantly under mil-

itary control; that he must be housed, clothed, and subsisted by the Government. The relations of the War Department to the colleges, therefore, were radically changed overnight. Colleges which had been approved for units of the Students' Army Training Corps under the first plan were now asked to contract with the War Department for the housing, feeding, and instruction of student soldiers, who should be at all times under military authority. It is a striking testimony of the patriotism of the colleges that practically all of them consented to enter this arrangement. Five hundred and seventeen higher institutions were authorized to maintain units of the Students' Army Training Corps.

On the administrative side difficulties at once arose, which the committee indeed foresaw but could not remedy. The members of the corps were theoretically at all times under military control. College officers, relieved of discipline and deposed from their ordinary authority, were nevertheless in a measure responsible for the academic progress of members of the corps. There was divided responsibility therefore, and an unfortunate dualism of authority which was never remedied before the demobilization of the Students' Army Training Corps.

The Students' Army Training Corps had a brief six weeks of life. Part of this period, moreover, was rendered useless in many institutions by the influenza epidemic which swept the country in the months of October and November, 1919. Indeed, the Students' Army Training Corps ran just long enough to develop all the possible centers of friction and to expose all its serious defects. The orders for its demobilization came before these defects could be remedied. Nevertheless, there were certain educational concepts involved in the plans for the corps which are worth recording. These have been recognized and appreciated by many college officers.

1. *Needs.*—Like the trade training in the National Army Training Detachments, the officers' training carried forward in the Students' Army Training Corps was to have been predicated upon a careful estimate of the needs of the Army for various kinds of officers. For example, the committee discovered that the Infantry service would require from the colleges 3,000 officers a month from October, 1918, and that the Field Artillery would require 2,000 a month. It analyzed the work which each of these types of officers would have to perform and the problems which they would have to meet. It then proceeded to organize courses to fit men directly for these tasks. The courses were originally outlined in consultation with officers from the various services. They were being modified and elaborated at the time of the demobilization of the Students' Army Training Corps. A system was also about to be inaugurated to as-

sign to each course a number of men corresponding to the number required in that branch of the service for which the particular course was designed to train. It was the committee's purpose to integrate training with Army needs, precisely as it had done in the case of mechanics and artisans.

The first prescribed courses issued to the units of the corps carried out in a tentative way this theory. It was understood that members of the Students' Army Training Corps would be called to active service at the time of the summoning of the age groups to which they severally belonged. Thus it was assumed that 20-year-old registrants would be called by January 1, 1919, that 19-year-old registrants would be called by April 1, 1919, and that the 18-year-old group would be summoned in July or August, 1919. The committee therefore required that the college year be divided into quarters. It assumed that 20-year-old students could remain in college three months, 19-year-old students six months, and 18-year-old students nine months. Exceptions were to be made in the case of students of unusual proficiency in specialized curricula, such as engineering, chemistry, medicine, etc. Former college class alignments were abandoned. Curricula were organized leading to each of the principal line and staff services, and divided into quarters. Each curriculum contained certain prescribed subjects. Military drill and a course on the issues of the war were prescribed in every curriculum. In the case of the three months' student the prescriptions were so numerous that there was practically no elective opportunity. A greater amount of freedom of choice was granted to the six months' student; the nine months' student, being allowed to distribute his prescribed work over three quarters, had a considerable amount of academic liberty.

2. *New organization of humanistic training.*—The course on the issues of the war which was prescribed in every curriculum was the direct result of the committee's satisfactory experience with the war-aims courses given to members of the National Army Training Detachments. Indeed, the outline for this course was evolved very largely from the questions asked by members of the National Army Training Detachments. The course on the issues of the war combined history, economics, government, literature, and philosophy. It paid no attention to the artificial divisions which have separated these subjects in the past. It aimed rather to bring about a fusion of the essential elements of these and other subjects. The design was to furnish the student soldier with facts, criteria, and inspiration which would enable him to understand his world and to relate his conduct to the major issues of his life. Incidentally the committee's action resulted in breaking down temporarily the illogical barriers between departments which have so long been traditional in academic organi-

zation. The courses on the issues of the war could not be fairly tested in practice within a period of six weeks. In many institutions, however, the principle upon which they were based so far commended itself to college officers that these courses are to serve as the model for organizing the fundamental elements of peace-time humanistic training. Commenting upon the permanent value of the war-issues course, Dean Woodbridge, of Columbia, says:

In the past, education was liberalized by means of the classical tradition. It afforded for educated men a common background of ideas and commonly understood standards of judgment. For the present that tradition no longer suffices. If education is to be liberalized again, if our youth are to be freed from the confusion of ideas and standards, no other means looks so attractive as a common knowledge of what the present world of human affairs really is. The war has revealed that world with the impelling clearness which tragedy alone seems able to attain. That our student soldiers may see the issues is of immediate consequence; but the war and its issues will be the absorbing theme of generations to come. To the thoughtful, therefore, the course affords the opportunity to introduce into our education a liberalizing force, which will give to the generations to come a common background of ideas and commonly understood standards of judgment.

3. *Objective tests.*—Inductions into the Students' Army Training Corps were originally based upon bona fide college membership. Colleges were expected to enforce their ordinary admission requirements. A larger number of new students than usual were drawn into the colleges, because the Government assumed their expenses and paid them soldiers' pay. The large and continuous supply of officer material which would be demanded, however, could not be produced with certainty if the old formal admission requirements must be absolved by every student soldier. The Students' Army Training Corps would have to be recruited from that much larger stratum of the population which possessed the capacity to pursue work of college grade but could not meet the formal entrance requirements. Hence a system of recruitment for the corps was devised which combined three elements: (a) A personal interview with every candidate, the purpose of which would be to determine the character of his schooling and experience and his general qualifications for college work; (b) the Army intelligence test; (c) in the case of candidates for courses which by their professional nature demanded special preparation in one or more subjects, such examinations as would be necessary to test the candidate's proficiency in these subjects. This recruitment plan was never issued, because demobilization of the corps was ordered and recruitment ceased. It is undoubtedly cause for regret that a comprehensive experiment with psychological and other objective tests of fitness for college work could not have been made. The material prepared by the committee has, however, interested numerous college officers and has apparently stimulated discussion

and careful consideration of its possible application in college entrance procedure.

Reference has been made to the brief life of the Students' Army Training Corps. To complete the record, it should perhaps here be stated that the corps enrolled some 142,000 men. The signing of the armistice on the 11th of November did away with the need for continuing it as the source of supply for officers. It was ordered demobilized by December 21.

It is, of course, still too early to say what, if any, effects the Students' Army Training Corps may have had upon college methods and organization. There has been, as might be expected, a period of sharp reaction. College officers, smarting under the humiliations imposed by the system of military control, are not disposed to find many virtues in the scheme. On the other hand, aside from the possible influence of the educational policies described above, the influence of military training and discipline upon the student body may have some permanent results. Both faculties and students have recognized the greater efficiency of a student body subject to a military régime. The by-products in the way of physical fitness, development of courtesy, and the spread of a democratic spirit are also too desirable to be lost. Colleges now have before them the task of devising means to retain these tangible advantages of the period of war training. They are also faced with the problem of transforming the spirit of self-sacrifice engendered by the national emergency into a spirit of service to the community and to the Nation in peace. The solution of this problem is admittedly difficult; but unless it is solved America will have lost the best fruits of the war.

It is worth while to point out one fundamental aspect of the Students' Army Training Corps which has not always been recognized. For the first time in history the higher institutions of the country were united in a common purpose. By offering themselves voluntarily to the War Department they created a single training plant for the production of specialists and officers for the Army. In other words, there was created for a brief period a national system of higher education. Further, the whole training program carried out in this system was based on an accurate forecast of national needs. The conditions were of course abnormal. They could never occur in times of peace; nor is it desirable that higher education should be controlled from the center. Nevertheless, this temporary organization contains important implications upon which the colleges themselves may profitably act.

The Students' Army Training Corps saved colleges from virtual extinction. In the letter announcing the plan (quoted above) the Secretary of War alludes to the preservation of higher education as

one of the two important purposes to be attained. In spite of the difficulties of readjustment to a peace basis and in spite of the financial losses (in case of some institutions very great), the higher educational machinery of the United States emerges from the war in more nearly normal condition than that of any other country.

The 15 months of effort to secure an adequate recognition of the importance of civilian training agencies culminated in the Students' Army Training Corps. With the establishment of this agency the Government accepted in its totality the contention of university and college authorities that higher institutions should be formally incorporated into the training plant of the military departments.

THE MOBILIZATION OF SCIENCE.

It was stated at the beginning of this section that the second great problem to the solution of which colleges contributed was the mobilization of science. It was generally recognized when the United States entered the war that the country possessed in its university, laboratories, and staffs of trained research workers an immense scientific capital which could be made immediately productive. Various agencies were at once established to facilitate the use of these resources by the Government and to designate problems for investigation which possessed special military importance.

THE INTERCOLLEGIATE INTELLIGENCE BUREAU.

One of the earliest of these agencies was the Intercollegiate Intelligence Bureau, established by the voluntary action of a group of universities and colleges, under the direction of Dean William McClellan, of the University of Pennsylvania. This bureau set itself the task of furnishing to Government departments, on request, the services of experts needed for highly specialized scientific and administrative tasks. Under its direction the scores of higher institutions which joined it prepared personnel records of those members of their student and alumni bodies and faculties who might be available for such services. Throughout 1917 the bureau furnished effective help to many Government agencies in building up an expert personnel.

THE NATIONAL RESEARCH COUNCIL.

The National Research Council, created by the National Academy of Sciences and affiliated with the Council of National Defense, served as the central agency for determining the research problems connected with the war, allocating them to different scientific agencies for solution and coordinating the results. Under its general direction the great centers of research throughout the country were

kept occupied with Government work. In some 25 of the leading educational institutions the study of problems relating to military optics, to ordnance, munitions, topography, and food conservation were carried on. The council was also concerned in investigations relating to gas defense, dyes, devices for the Navy, high explosives, electrical problems connected with wireless, smoke screens, fuel substitutes, detection of submarines, various pathological and medical problems, the testing of materials, etc. Associated with it also were the group of psychologists, whose contributions revolutionized the methods of organizing Army and Navy personnel.

THE WAR SERVICE OF PROFESSORS.

Large numbers of academic experts in pure and applied science were summoned from their regular university duties and entered the Government service. They became expert advisers and administrators for the Army, the Navy, the War Industries Board, the Food Administration, the Fuel Administration, and nearly every other branch of the Government engaged in preparing for and waging war. A complete census of college and university teachers so employed has not been, perhaps will never be, made. They were numbered literally by hundreds. They rendered services which none but men so trained could render. They were indispensable. Doubtless the effect of this service on the status of the university professor in the public mind will be revolutionary.

THE DEVELOPMENT OF PUBLIC MORALE.

The third problem relating to preparation for war, in which from the outset the higher institutions were concerned, was the development of public morale. Reference to the statement of principles on page 40 shows that college officers early recognized their responsibility in the dissemination of correct information concerning the issues of the war and the interpretation of its meaning. This task had been assumed by the higher institutions of Canada and carried forward by them for three years with extraordinary success. In greater or less measure probably nearly every institution in the United States attempted to perform this service. Two or three especially interesting examples may be mentioned.

The University of Washington, whose president, Henry Suzzallo, was also chairman of the State Council of Defense, organized a group of college and university teachers and teachers in secondary schools, which rendered most effective service in explaining the issues of the war to laborers engaged in war industries. Numerous threatened labor disturbances in the Northwest were thus averted.

The University of North Carolina, which had before the war an especially well organized extension bureau, developed immediately upon the entry of the United States into the war a war-information service. Reports from that State indicate that this was a very effective factor in the development of an intelligent comprehension of America's part in the struggle. The following quotation, from a leaflet issued by the university, gives an outline of this service:

1. **EXTENSION CENTERS.**—Centers may be established in any community upon the application of a properly organized group of students. From one course to six courses given at each center, each course requiring a month for its completion. A member of the university faculty to be sent to the center at the beginning of the course and the remainder of the group meetings directed by him through a local, well-qualified man. The work to be guided by a syllabus, by outlines, and tested by an examination. The courses to form a consistent whole. The courses (by way of example):
 - a. Theories of the State.
 - b. Europe since 1815.
 - c. South American Relations.
 - d. Political Idealism in British and American Literature.
 - e. Economic and Social Aspects of the War.
 - f. The War as Reflected in Recent Literature.
2. **GROUP LECTURES.**—Four or five or more of these lectures or similar lectures more popularly treated and without intensive class study may be arranged as a series by any community (e. g., one a month by a Young Men's Christian Association, or similar organizations).
3. **CORRESPONDENCE COURSES** (with college credit) and **READING COURSES** (without credit) on the subject matter of these extension center courses, using the same syllabus and other material, but in more popular form. A textbook (326 pages), "American Ideals" (Houghton Mifflin & Co.), prepared by two of the professors, is a source book of selections showing through state papers, speeches, etc., the development of American thought, political ideals, etc.
4. **SINGLE LECTURES** on a wide variety of subjects related to the war will be furnished to communities as a part of any other lecture plan they may have for special occasions. A list of lecture subjects and lecturers furnished on application.
5. **READERS' SERVICE.**—This service undertakes to furnish through the university library, the faculty cooperating, information as to books, articles on special subjects relating to the war, furnishing small package libraries of pamphlets on half a dozen important phases of the war and in so far as possible lending books and acting as a distributing agency for putting Government and other publications in the hands of interested readers.
6. **DIRECT PUBLICITY ON WHY WE ARE AT WAR AND WHY THIS IS OUR WAR.**
 - a. Special articles by members of the faculty in journals of education and the like, and special leaflets to be issued by the Extension Service and sent to public school teachers.
 - b. Special editions of the University News Letter (a weekly clip sheet published by the university) devoted to these subjects and sent

to a special list of people influential in their local communities, but not for the most part readers of the daily press.

- c. Debate subjects and outlines, composition subjects and patriotic programs, for school exercises and celebrations, community gatherings, etc.

7. **THE LAFAYETTE ASSOCIATION.**—An association—State-wide and Nation-wide, if possible—composed of high-school and grammar-school students, parents, and others interested, called the Lafayette Association to symbolize the ideals to which Lafayette devoted his life and for the purpose of “realizing the infinite power of the public school as the center of the community life of the Nation in the essential task of nourishing, developing, and crystallizing, through expression, the national spirit of present and future America.” A full explanation of the Lafayette Association is given in another leaflet.

It soon became apparent, however, that a central official agency was needed, not only to furnish reliable data to these local institutions, but also to give consistency and point to the scattered efforts of individual bodies. The task fell almost by force of gravity to the Committee on Public Information. This committee recruited the services of the best scholars in the fields of history, economics, and government, and under the leadership of Dean Guy Stanton Ford, of the University of Minnesota, prepared the Red, White and Blue Series of popular monographs on the background and issues of the war.

THE NATIONAL BOARD FOR HISTORICAL SERVICE.

The activities of the National Board for Historical Service may appropriately be counted as one of the contributions made by the universities to the war. The board was organized on April 29, 1917, and established headquarters in Washington. Under the chairmanship of Prof. Evarts B. Greene, of the University of Illinois, it sought to direct the activities of historical scholars into lines of national service. It furnished advice concerning university courses, public lectures, popular articles, and research. Cooperating with the History Teachers' Magazine, it contributed a number of supplements, including documents illustrating the German occupation of Belgium, a selected and annotated bibliography of the war, and a notable topical outline entitled “A Study of the Great War,” prepared by Dr. S. B. Harding. The board was also in close and active cooperation with the Committee on Public Information, especially in the preparation of the War Information Series and the Red, White and Blue Series.

INTERNATIONAL RELATIONS IN HIGHER EDUCATION.

The war has brought about in the United States a great enhancement of interest in every phase of civilization in the allied countries. Especially have the friendly relations which have existed so long

between the universities of this country and those of France and England received added stimulus. In January, 1918, the commissioner for engineering and education of the Advisory Commission of the Council of National Defense issued, with the indorsement of the council, an invitation to university officers of the allied countries to send groups of representatives to America to confer with and to advise the officers of American institutions. The first nation to respond to this invitation was Great Britain. A distinguished mission, representing British universities, landed in New York on the 8th of October. The members of the mission were as follows:

Dr. Arthur Everett Shipley, vice chancellor of the University of Cambridge,
Sir Henry Miers, vice chancellor of the University of Manchester.

Rev. Edward Mewburn Walker, librarian of Queen's College, Oxford.

Sir Henry Jones, professor of moral philosophy, University of Glasgow.

Dr. John Joly, professor of geology and mineralogy, Trinity College, Dublin.

Miss Caroline Spurgeon, professor of English literature, University of London.

Miss Rose Sidgwick, lecturer on history, University of Birmingham.

Arrangements for their entertainment were made by the American Council on Education. After a visit to Washington, where they were received by the President and by the Council of National Defense, they made a tour of a considerable number of universities and colleges east of the Mississippi River. Conferences on important aspects of the question of educational exchanges between the United States and Great Britain were held in Philadelphia, New York, Chicago, Minneapolis, Houston, and Boston. Definite arrangements were made for the mutual recognition of academic credentials, and tentative plans were proposed for the interchange of students and professors.



DEPARTMENT OF THE INTERIOR
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BULLETIN, 1919, No. 23

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OF CURRENT EDUCATIONAL
PUBLICATIONS

APRIL, 1919



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MONTHLY RECORD OF CURRENT EDUCATIONAL PUBLICATIONS.

Compiled by the Library Division, Bureau of Education.

CONTENTS.—Proceedings of associations—Educational history and biography—Current educational conditions—Educational reconstruction—Educational theory and practice—Educational psychology; Child study—Educational tests and measurements—Special methods of instruction—Special subjects of curriculum—Kindergarten and primary school—Rural education—Secondary education—Teachers: Training and professional status—Higher education—School administration—School management—School hygiene and sanitation—Physical training—Social aspects of education—Child welfare—Religious education—Manual and vocational training—Vocational guidance—Agricultural education—School gardens—Commercial education—Civic education—Americanization of immigrants—Re-education of war invalids—Education of soldiers—Education of women—Education of deaf—Exceptional children—Education extension—Libraries and reading—Bureau of Education: Recent publications.

NOTE.

The record comprises a general survey in bibliographic form of current educational literature, domestic and foreign, received during the monthly period preceding the date of its publication.

This office can not supply the publications listed in this bulletin, other than those expressly designated as publications of the Bureau of Education. Books, pamphlets, and periodicals here mentioned may ordinarily be obtained from their respective publishers, either directly or through a dealer, or, in the case of an association publication, from the secretary of the issuing organization. Many of them are available for consultation in various public and institutional libraries.

Publications intended for inclusion in this record should be sent to the library of the Bureau of Education, Washington, D. C.

PROCEEDINGS OF ASSOCIATIONS.

417. Brooklyn teachers association. President's report . . . forty-fourth year, 1917-1918. 76 p. 8°. (Mary E. Hamilton, secretary, P. S. 27, Brooklyn, N. Y.)

Contains a statistical report of results of the test conducted by Dr. I. H. Goldberger on teachers' vitality as influenced by the nationality, sex, and grade of pupils taught.

418. National education association. Journal of proceedings of the fifty-sixth annual meeting . . . Pittsburgh, Pa., June 29-July 6, 1918. Journal of the National education association, 8: 295-356, January 1919.

Department of deans of women.—Contains: 1. Bernice E. Sanford: Organization of social life where there are no dormitories, and housing students under such conditions, p. 300-302. 2. G. S. Dick: What a president may rightly ex-

pect from a dean of women, p. 302-4. 3. Helen M. Smith: What the dean may rightly expect from the president, p. 304-306. 4. Florence L. Richards: What a dean may rightly expect from a president, p. 306-9. 5. Mina Kerr: The college community life as an opportunity for socialization, p. 309-11. 6. Janet M. Purdue: Deaning in the public high school, p. 311-13. 7. Romlett Stevens: What constitutes social ethics, p. 314-16. 8. Lucinda W. Prince: College women in business, p. 316-18. 9. Mary W. Woolley: Some ideals for deans, p. 318-20.

Department of school patrons.—10. Mrs. O. S. Barnum: Guarding the schools in war time, p. 332-34. 11. Ella A. Moore: Report of the committee on vocational supervision, p. 335-37. 12. Margaret S. McNaught: Guarding the schools in war time, p. 337-30. 13. Marie T. Harvey: Rural schools in the war, p. 340-42. 14. W. H. Swift: The status of the child, state and national, as a result of the war, p. 342-45. 15. Sally L. Jean: Health problems in education, p. 345-48.

Department of music education.—16. Will Earhart: The essential factor in musical education, p. 350-54. 17. Osbourne McConathy: In what direction is public music education tending? p. 354-56.

419. **Texas state teachers' association.** Proceedings of the fortieth annual meeting . . . Dallas, Texas, November 28-30, 1918. Texas state teachers' association bulletin, 3: 1-98, March, 1919. (R. T. Ellis, secretary, Fort Worth, Texas.)

Contains: 1. G. D. Strayer: Address [on educational reconstruction and the proposed department of education] p. 9-14. 2. W. F. Doughty: The adjustment of educational agencies to present and future conditions resulting from the war, p. 14-15. 3. H. T. Hunter: Report of the committee on educational progress without the state, p. 20-26. 4. Maggie W. Barry: The training of the young women of the nation for the increased responsibilities growing out of a new world condition, p. 31-33. 5. C. P. Neill: Education and citizenship, p. 33-37. 6. Clarence Ousley: The place of agriculture in our reconstruction program, p. 37-42. 7. N. S. Hunsdon: Vocational education in Texas under the Smith-Hughes act, p. 51-54. 8. Julia C. Lathrop: Responsibility of the school for the physical well-being of the child, p. 54-58. 9. Annie W. Blanton: Some of the problems of school administration as affected by present war conditions, p. 60-63. 10. Charles Meek: The re-direction of secondary educational agencies as result of present world conditions, p. 63-64.

EDUCATIONAL HISTORY AND BIOGRAPHY.

420. **Crothers, Samuel McChord.** Education in pursuit of Henry Adams. Yale review, 8: 580-95, April 1919.

Reviews the book entitled *The education of Henry Adams*. Says that Henry Adams has written an educational autobiography, in which he exhibits not his achievements but his limitations.

421. **Hobson, Elsie Garland.** Educational legislation and administration in the state of New York, 1777-1850. [Menasha, Wis., George Banta publishing company] 1918. 267 p. 8°

A dissertation submitted to the faculty of the Graduate school of arts and literature in candidacy for the degree of doctor of philosophy, Department of education.

422. **Judd, Charles H.** German influences in the schools of Ohio. Educational review, 57: 205-19, March 1919.

A study based on the laws and resolutions passed by the Ohio legislature, and the school reports of the city of Cincinnati.

423. **Kohler, Max J.** Educational reforms in Europe in their relation to Jewish emancipation, 1778-1878. [New York] 1919. 29 p. 8°

Reprinted from the Jewish forum, February 1919.

424. **Lane, Franklin K.** Armstrong's contribution to education. Southern workman, 48: 106-12, March 1919.

Address delivered at the Hampton normal and agricultural institute, Hampton, Va., at the celebration of Founder's day, January 26, 1919.

425. **North Carolina. University.** Edward Kidder Graham, 1876-1918. Raleigh, Edwards & Broughton printing company, 1919. 38 p. 8°. (University of North Carolina record, no. 162, January 1919)
Contains: 1. H. H. Williams: President Graham as the University knew him, p. 7-11. 2. R. D. W. Connor: President Graham's work as the state saw it, p. 12-19. 3. C. A. Smith: President Graham and the nation, p. 20-24. 4. N. W. Walker: Edward Kidder Graham: Interpreter of culture and democracy, p. 25-33.
426. **Two notable educators:** Edward Kidder Graham; Kirby Flower Smith. *Sewanee review*, 27: 101-8, January-March 1919.
Symposium by Archibald Henderson and T. S. Duncan.

CURRENT EDUCATIONAL CONDITIONS.

GENERAL AND UNITED STATES.

427. **American Oxonian**, vol. 6, no. 1, January 1919. (Results of the British universities mission)
Contains: 1. American opinion, by S. P. Capen and others, p. 1-16. 2. British opinion, by E. H. Walker and others, p. 17-29.
428. **The British educational mission.** *University record* (Chicago) 5: 1-42, January 1919.
A stenographic record of the conference held at the University of Chicago at the time of the visit of the British educational mission. Discussion of measures devised to improve the intimacy of our relations with British universities, not only as regards our students, but also as regards the faculties of our several institutions.
429. **Canby, Henry Seidel.** *Education by violence.* *Harper's magazine*, 138: 558-65, March 1919.
War, as Thucydides said, educates by violence; and by violence the soldiers of the great war have been educated to understand what a man must know about life. Presents some lessons which America may learn from British educational experience.
430. **Clapp, Frank L. and Greene, Charles E.** *The public schools of Idaho Springs, Colorado. A survey.* Boulder, Colo., 1918. 87 p. 8°. (*University of Colorado bulletin*, vol. 18, no. 9, September 1918)
431. **Mackay, Ira A.** *Educational preparedness.* *Canadian magazine*, 52: 807-18, February 1919.
Author is professor of law, University of Saskatchewan.
432. **Massachusetts. Special commission on education.** Report of the special commission on education appointed under authority of chapter 88 of the Resolves of 1918 to investigate the educational systems of the commonwealth. Boston, Wright & Potter printing co., state printers, 1919. 107 p. charts, tables. 8°. (Senate, no. 830)
433. **Nebraska on use of English.** *Americanization*, 1: 6, March 1, 1919.
A brief summary of the recommendations in the report of a committee appointed by Gov. Neville, of Nebraska, to investigate the language situation in the state. The report recommends that English be the sole language of instruction in the elementary schools, both public and private, but that religious worship be conducted in any language necessary to the understanding of those attending.
434. **Ohlinger, Gustavus.** *The German conspiracy in American education* New York, George H. Doran company [1910] 113 p. 12°.
Gives an account of the artful German propaganda which was long carried on in American schools and universities, and through textbooks. The book is quoted in articles by T. Everett Harré in the *National civic federation review*, February 15, 1919, p. 12-16, 18-19, and March 5, 1919, p. 7-9.
435. **St. Louis. Board of education.** *Survey of the St. Louis public schools.* *Yonkers-on-Hudson, N. Y., World book company*, 1918. 3 v. 12°. (*Educational survey series*)
Dr. Charles H. Judd, director of the survey.

436. **Ulm, Aaron H.** National education and its pilot. *Forum*, 61: 233-04, March 1919.

Gives a sketch of legislation in Congress since 1913 to establish a national program of education. The "pilot" mentioned in the title is Senator Hoke Smith, of Georgia.

FOREIGN COUNTRIES.

437. **Beasier, C.** Philosophie de l'école de demain. *Revue pédagogique*, 73: 425-33, December 1918.

The education of yesterday was essentially intellectual. The pedagogy of tomorrow should be a pedagogy of action, or better yet, a pedagogy of heroism.

438. **Gros, J.** L'inspection primaire en France. Deuxième partie: de 1850 à 1915. *Revue pédagogique*, 73: 414-24, December 1918; 74: 13-29, January 1919.

These articles cover the period from the Coup d'état to 1915. Continued from *Revue pédagogique*, 73: 258-65, October 1918.

439. **Kuo, P. W.** The future place of education in China. *Chinese recorder* (Shanghai) 50: 20-24, January 1919.

440. **Skubniewski, Capitaine.** L'éducation de demain au lycée. *Revue universitaire*, 28: 14-20, January 1919.

EDUCATIONAL RECONSTRUCTION.

441. **Bawden, William T.** Industrial arts in reconstruction. *School and society*, 9: 279-84, March 8, 1919.

Address delivered before the Vocational education association of the Middle West, Chicago, January 17, 1919.

442. **Hibben, John Grier.** A national university. *Evening post magazine* (New York) March 8, 1919. p. 1, 10.

President Hibben outlines the new educational policy that is being developed at Princeton to meet after-the-war needs.

443. **Judd, Charles H.** A national educational system. *Yale review*, 8: 651-63, April 1919.

Says that the first problem confronting the purified democracy that is to issue from this war is the problem of making the American educational system truly continuous. The reorganization of the schools and the reorganization of the material of instruction need the strong guidance of a federal department.

444. **National education association.** A national program for education. Washington, D. C., National education association, 1918. 4 pamphlets. 8°. (Commission series 1-4.)

1. A statement issued by the N. E. A. commission on the emergency in education and the program for readjustment during and after the war.—2. Statistical data relative to the distribution of federal grants as proposed by Senate bill 4987.—3. Federal appropriations for the preparation of public school teachers.—4. The emergency in rural education.

445. **Ohio history teachers' journal**, no. 12, January 1919. (Reconstruction in civic education, etc.)

Contains: 1. Raymond Moley: Reconstruction in civic education, p. 3-8. 2. J. W. Ayer: The teaching of European history after the war, p. 11-15. 3. P. Shively: Reconstruction of the methods of teaching American history after the war, p. 16-19. 4. E. W. Dow: Principal weaknesses of freshmen in history with some consideration of the remedy, p. 20-26.

446. **Reconstruction needs considered from various angles of alumni and others.** *Yale alumni weekly*, 28: 587-95, February 23, 1919.

The Alumni day morning speeches at Yale university.

Contains: 1. W. A. Brown: The corporation committee, p. 587-89. 2. S. C. Bushnell: The alumni committee on development, p. 589-90. 3. Williston Walker: The faculty viewpoint, p. 590. 4. E. M. McKee: From the student point of view, p. 590-93. 5. A. T. Hadley: Yale reconstruction from the standpoint of the university administration, p. 593-94.

447. **Bowe, Stuart A.** The high schools of the future. *School*, 80: 278, March 18, 1919.
 Extracts from an address delivered before the New York academy of education on "The effect of the war on education." Dr. Rowe predicts that the high schools will be humanized as a result of the war.
448. **Smith, Edgar F.** Training for leadership. *Alumni register* (University of Pennsylvania) 21: 428-33, March 1919.
 Also with added comments in *Pennsylvania gazette*, 17: 482-84, February 28, 1919.
 Believes that in this period of reconstruction the University of Pennsylvania should educate for leadership.
449. **Smith, Frank Webster.** Reconstructive teacher training for elementary schools. *School and society*, 9: 317-21, March 15, 1919.
 Advocates reconstructive work along three lines (1) reform in salary concepts, (2) greater accessibility of teacher-training, and (3) better differentiation between training for rural schools and training for city schools.
450. **Thwing, Charles F.** American society after the war. *Hibbert journal*, 17: 282-91, January 1919.

EDUCATIONAL THEORY AND PRACTICE.

451. **Himelick, B. W.** Educational democracy. *Journal of education*, 89: 255-57, March 6, 1919.
452. **National education association.** National council of education. Report of the sub-committee on curriculum of the committee on superintendents' problems, on existing democratic factors in American education. (The democracy questionnaire) *School and society*, 9: 237-47, February 22, 1919.
 A. Duncan Yocum, chairman.
453. **Patri, Angelo.** Vers l'école de demain. *Revue de Paris*, 26: 282-301, January 15, 1919.
 This article is an extract from a book with the same title, soon to be published by Hachette of Paris. The writer is an elementary school principal in New York city, and author of *A schoolmaster of the great city*.
454. **Pearson, Francis B.** The reconstructed school. *Yonkers-on-Hudson. N. Y., World book company*, 1919. 120 p. 12°. (School efficiency monographs.)
 Author undertakes to point the way toward larger and better results in the realm of variable phases of school procedure. Some chapter headings are Integrity, Appreciation, Aspiration, Initiative, Imagination, Reverence, Sense of responsibility, Loyalty, Democracy, Serenity, Life.
455. **Smith, Walter George.** The world war and the scientific theory of education. *Catholic world*, 108: 721-30, March 1919.
 Classical versus utilitarian education.
456. **Stillman, Charles B.** Democracy and education. *American teacher*, 8: 29-33, February 1919.
 Address delivered at Reconstruction conference of National popular government league, Washington, D. C., January 10, 1919.
 In conclusion the writer says that we can not attain genuine democracy in education until we make teaching self-supporting, self-respecting, and an organic part of our national and community life.

EDUCATIONAL PSYCHOLOGY; CHILD STUDY.

457. **Watts, Frank.** Echo personalities, a short study of the contributions of abnormal psychology towards the solution of some of the problems of normal education. London, George Allen & Unwin Ltd. [1918] 111 p. 12°.

EDUCATIONAL TESTS AND MEASUREMENTS.

453. **Gray, William S.** Reading in the elementary schools of Indianapolis. *Elementary school journal*, 19: 419-44, February 1919.
Second paper. Gives results of the oral-reading and silent-reading tests in fifteen schools of Indianapolis, Ind., involving some 1,484 pupils. Illustrated with diagrams.
450. **Hill, David Spence.** Mental tests: nature and uses. *School and home education*, 38: 127-30, February 1919.
460. **Kallom, Arthur W.** The importance of diagnosis in educational measurement. *Journal of educational psychology*, 10: 1-12, January 1919.
"Educational measurements should ultimately bring about an improvement in the education of each boy and girl. To do this emphasis must be laid upon the value of measurements to the teacher in detecting the particular weaknesses of individual pupils, and in helping her to devise corrective measures. Examples are given from the use of the Courtis arithmetic tests."
461. **Langfeld, Herbert Sidney.** Mental tests for college entrance. *Harvard alumni bulletin*, 21: 464-66, March 13, 1919.
The program of Columbia university in giving mental tests for college entrance.
462. **Mead, Cyrus D.** Educational measurements. *Sierra educational news*, 15: 122-27, March 1919.
Traces briefly the evolution of the measurements movement, and shows by illustrations from the common-school subjects the constructive values of tests and measurements.
463. **Minnesota. University.** An investigation into the amount of improvement, in ability to write English composition, 1918-1919. Minneapolis, [1919]. 18 p. 8°. (Bulletin, vol. XXII, no. 5, February 21, 1919)
463. **Minnesota University.** An investigation into the amount of improvement in ability to write English composition, 1918-1919. Minneapolis, [1919] 18 p. 80°. (Bulletin, vol. XXII, no. 5, February 21, 1919)
Results of an investigation initiated by the Bureau of cooperative research at the College of education, University of Minnesota, in conjunction with a committee appointed by the English teachers association of Minnesota. Nearly 100 high-school teachers of English in the State took part in measuring the growth of ability to write compositions as a result of twelve weeks' work in weekly theme writing.
464. **Uhl, W. L.** Mentality tests for college freshmen. *Journal of educational psychology*, 10: 13-28, January 1919.
"The author tested a group of 100 freshmen with the Trabue completion tests, hard opposites, and a range of information test. The opposites and the completion tests were found to be more satisfactory than the range of information test. All correlations, however, were low."
465. **Webb, Hanor A.** A preliminary test in chemistry. *Journal of educational psychology*, 10: 36-43, January 1919.
466. **Woody, Clifford.** The teaching of educational measurements. *Educational administration and supervision*, 5: 7-14, January 1919.
Suggestions on the time that should be given to educational measurements in normal courses and the most effective way to teach the giving of these tests.
467. **Yerkes, Robert M.** The mental rating of school children. *National school service*, 1: 6-7, February 15, 1919.
Experience with army intelligence tests suggested as a basis for better classification of pupils.

SPECIAL METHODS OF INSTRUCTION.

468. **Moore, C. H.** Importance of the film in industrial education. *Educational film magazine*, 1: 29-30, February 1919.

- 469. Roach, Charles.** A national division of visual instruction. *Educational film magazine*, 1: 11, 27, February; 11-12, March 1919.

Thinks that a national division of visual instruction affiliated with the Federal Bureau of education or the National education association, and cooperating with the states, may succeed in solving all educational film problems.

SPECIAL SUBJECTS OF CURRICULUM.

LITERATURE.

- 470. Barnes, Walter.** The use of modern fiction in the high school course in literature. *Education*, 39: 436-47, March 1919.

- 471. Harvey, P. Casper.** Analysis in teaching the short-story. *English journal*, 8: 97-100, February 1919.

Study based on the work of a class of 43 seniors in the Leavenworth (Kans.) high school. The purpose was to present the technique of the short-story inductively.

- 472. Sherwood, Margaret.** Vital study of literature. *Educational review*, 57: 220-41, March 1919.

Speaks of the great need of an awakened interest in the humanities, the most important of which is literature. Teaching high-school students to appreciate the masterpieces of the world's literature.

ENGLISH AND COMPOSITION.

- 473. Committee on economy of time in the teaching of English.** (Mary B. Fontaine, chairman, Glenville, W. Va.) Tentative report of the subcommittee, chairman, Glenville, W. Va. Tentative reports of the subcommittee on mechanics of writing. *English journal*, 8: 105-21, February 1919.

- 474. St. John, C. W.** The spelling of English by Porto Rican pupils. *Porto Rico school review*, 3: 31-50, January; 24-30, February; 18-32, March 1919.

Three articles in a series of five. The first deals with the most frequent misspellings, the second with a classification and an analysis of spelling errors, and the third with methods of instruction.

MODERN LANGUAGES.

- 475. Arnold, Frank B.** France as well as French. *Educational review*, 57: 242-46, March 1919.

Dwells on the demand for teachers of French. Gives a résumé of some good books in French.

- 476. Aronstein, Philipp.** Das Englische als gegenstand "nationaler auslandsbildung" an unseren höheren schulen. *Monatschrift für höhere schulen* (Berlin) 17: 208-21, May-June 1918.

An interesting discussion in a German educational periodical, lately come to hand, of the value of the English language, literature, and civilization as subjects of study in German schools and universities. The article advocates the study of foreign peoples from a German national standpoint, in such a way as to note in other nations the qualities which may supplement the distinctive German "kultur."

- 477. Bovée, Arthur G., and others.** French course of study. *Modern language journal*, 3: 193-213, February 1919.

Gives typical lessons for elementary and university high schools.

- 478. Cazamian, Louis.** Some aspects of the teaching of English in French universities. *University of California chronicle*, 21: 35-38, January 1919.

Professor Cazamian was a member of the French educational mission to the United States.

479. **Goblot, E.** Apprenons tout de même l'allemand. *Revue de l'enseignement des langues vivantes*, 36: 67-69, February 1919.

Writer contends that every good Frenchman should know the German language, in order to understand any plans which the Germans may in future make against the safety of France.

480. **Jenney, Florence G.** Shall Americans study German? *Oberlin alumni magazine*, 15: 143-48, March 1919.

Says that when the practical disadvantages of not knowing German become embarrassing enough, we shall study German again.

481. **Livingston, Arthur.** Modern languages and the new world order: for a school of language, commerce and diplomacy. *School and society*, 9: 219-23, February 22, 1919.

482. **Van Horne, John.** Reading texts used during the past five years in first and second year college Spanish. *Modern language journal*, 3: 218-30, February 1919.

Says that a decrease in volume of readings has taken place in spite of an unquestionable tendency toward simplification in texts used.

ANCIENT LANGUAGES.

483. **Nixon, Arabella M.** The value of Latin to the student of English. *South Dakota educator*, 32: 7-10, March 1919.

484. **West, Andrew F.** The classics and educational reconstruction. *Princeton alumni weekly*, 19: 400-401, February 26, 1919.

GEOGRAPHY.

485. **Allen, Nellie B.** Power versus knowledge as the aim in the teaching of geography. *Journal of education*, 89: 233-34, February 27, 1919.

486. **Atwood, Wallace W.** Geography in America. *Geographical review*, 7: 36-43, January 1919.

Emphasizes the need for the extension of geographic study in schools and colleges.

487. **Whitbeck, R. H.** The country's call for geographers to-day and to-morrow. *School and society*, 9: 223-28, February 22, 1919.

Abridged from an address before the Central association of science and mathematics teachers, Chicago, November 30, 1918.

488. **Whitehouse, Wallace H.** Geographical teaching methods: criticisms and suggestions. *Journal of geography*, 18: 97-109, March 1919.

Reprinted from the *Scottish geographical magazine*, vol. 34, September 1918. This article is based on a paper read at a meeting of the Geographical association, London, January 5, 1918.

Deals particularly with conditions in geography teaching in Great Britain, but should prove suggestive to teachers in American schools.

SCIENCE AND MATHEMATICS.

489. **Central association of science and mathematics teachers.** *Proceedings of the eighteenth meeting held at Chicago, Ill., November 29-30, 1918.* *School science and mathematics*, 19: 197-263, March 1919.

Contains: 1. A. Barthelemy: Progressive science and mathematics courses and teaching in France, p. 199-204. 2. Will Scott: The function of zoology in the curriculum of the modern high school, p. 209-14. 3. F. T. Ulrich: Course in agriculture for a four-year high school, p. 214-27. 4. E. R. Downing: A range of information test in science, p. 228-33. 5. B. G. Beals: General science from a principal's viewpoint, p. 242-47. 6. C. M. Howe: Can and should general science be standardized? p. 248-55. 7. Final report of sub-committee on content of course in first-year mathematics, p. 259-64.

490. Mayo, C. H. P. The position of mathematics. *Educational review*, 57: 194-204, March 1919.

Says that mathematics should be taught primarily to educate the human mind and not merely for instruction. Speaks of the neglect of mathematics in the upper classes of English secondary schools. Emphasizes the importance of the study and deprecates the amount of time given to the classics.

ELOCUTION.

491. Ryan, J. P. Recent tendencies in the teaching of public speaking in college. *English journal*, 8: 90-96, February 1919.

Lays emphasis on the correction of speech defects, and shows the necessity of research work in the underlying sciences.

KINDERGARTEN AND PRIMARY SCHOOL.

492. Wilson, Mabel A. What is a kindergarten? *Kindergarten and first grade*, 4: 105-107, March 1919.

The meaning of kindergarten and whether or not the name should be rejected.

RURAL EDUCATION.

493. Burrows, Mark. A study in rural education. *Rural school messenger*, 8: 57-65, January 1919.

A survey of the rural schools of Missouri.

494. Deffenbaugh, W. S. The administration of village schools. *American school board journal*, 58: 27-28, March 1919.

SECONDARY EDUCATION.

495. Illinois. University. High school conference. *Proceedings*. . . November 21-23, 1918. Urbana, Pub. by the University of Illinois, 1919. 306 p. 8°. (University of Illinois bulletin, vol. 16, no. 12, November 18, 1918.)

Contains: 1. H. A. Hollister: High-school education a universal standard, p. 15-20. 2. W. W. Charters: What has thus far been accomplished and is now available for the readjustment of school curricula, p. 20-30. 3. E. E. McNary: Training men to build a bridge of ships, p. 35-38. 4. J. D. Fitz-Gerald: Report of the interlocking committee on the coordination of language study for the high schools of Illinois, p. 40-49. 5. J. S. Brown: Supervised and directed study, p. 50-57. 6. J. A. Stevenson: The project in science teaching, p. 57-66. 7. K. G. Smith: The adaptation of the Smith-Hughes law to community needs, p. 84-88. 8. A. R. Crathorne: Correlations among high school subjects, p. 133-38. 9. L. D. H. Weld: Correlating education with business, p. 148-51. 10. H. A. Hollister: The teacher problem for rural and village schools, p. 161-62. 11. Report of Committee on training in American ideals, p. 179-83. 12. W. E. Andrews: The aims in teaching high school geography, p. 189-95. 13. [Report of the Committee on the revision of the art course], p. 196-207. 14. F. D. Crawshaw: Manual arts after the war, p. 207-209. 15. M. Schweickhard: Army school organization adapted to manual arts, p. 211-16. 16. W. B. Owen: The place of German in our high schools after the war, p. 235-37. 17. O. H. Moore: The place of Italian in the high school, p. 238-42. 18. Mary D. Phillips: Music a factor in Americanization, p. 248-52. 19. J. H. Beard: The finding of the draft and its relation to school problems, p. 262-74. 20. Edith Hildebrandt: The aims of physical education, p. 278-83. 21. C. F. Phipps: The value of project study in the teaching of physics, p. 285-89. 22. J. W. Shepherd: Project studies in high school physics and chemistry, p. 289-98.

496. Abbott, Alden H. Shall we teach efficiency in our high schools? *School and society*, 9: 284-89, March 8, 1919.

An attempt to teach the science of personal efficiency in the high school.

497. **Bagley, W. C.** The universal high school. School and home education, 38: 122-26, February 1919.

Read before the high school department, Pennsylvania educational association, December 30, 1918.

The possibility of developing a type of liberal education that can be profitably given to practically every child of high school age.

498. **Phillips, D. E.** The decalogue of the junior high school. School review, 27: 161-71, March 1919.

Says that the standard junior high school is not yet in existence. Presents ten demands to which such a school should conform. Says that properly supervised study is desirable everywhere, but imperative in the junior high school; under wise direction there should be almost unlimited freedom in the choice of subjects, and ample opportunities for industrial work, etc.

499. **Bapeer, Louis W.** Minimal essentials in the high school. High school journal, 2: 67-72, March 1919.

Non-English languages and non-arithmetical mathematics.

500. **Steeves, H. B.** "The Board" and the high school teacher. English leaflet, 19: 1-8, March 1919.

The College entrance examination board and the teacher of high school English in the Northern Atlantic States.

501. **Willett, G. W.** Permanence of pupil interests. School and society, 9: 334-38, 365-68, March 15, 22, 1919.

High school pupils' interests in the various subjects of the curriculum.

TEACHERS: TRAINING AND PROFESSIONAL STATUS.

502. **Allen, T. T.** Teachers' meetings upon a democratic basis. Educational administration and supervision, 5: 19-24, January 1919.

503. **Dick, George S.** The work of the normal school in the making of a rural teacher. American school, 4: 300-301, December 1918.

The president of the State normal school at Kearney, Nebr., tells what qualities the rural teacher should have and what the normal schools are doing to give them these qualifications.

504. **Gould, J. C.** Teachers' salaries in North Dakota. American school board journal, 58: 31-32, March 1919.

The effects of war conditions on teachers' salaries and the need for some readjustments.

505. **Hughes, Helen Sard.** The academic chance. Journal of the Association of collegiate alumnae, 12: 79-82, January 1919.

Statistics of women teachers in colleges and universities.

506. **Keith, John A. H.** Some reasons for federal aid to state owned and controlled institutions and agencies for the preparation of public school teachers. American school, 4: 296-97, 301, December 1918.

507. **Kent, Raymond A.** University preparation of teachers for high schools. School review, 27: 171-85, March 1919.

Data obtained from written statements prepared by 100 University of Kansas students in the last semester of their senior year. Says the writer: "No matter how great one's zeal, one looks almost in vain, among college instructors or among prospective teachers, for any evidence that the high school is thought of as the 'people's school.'"

508. **Michigan state teachers' association.** Teachers' salaries in Michigan. February 1919. Pub. by the Committee on salaries, 1919. 36p. 8°.

Contains statistics showing the average salary and expenses of teachers in 141 cities.

509. **Smart, Thomas J.** Training a socialized rural leadership. American journal of sociology, 24: 389-410, January 1919.

A tentative outline of a scheme for training elementary teachers of rural schools as adapted to the needs of Minnesota

510. **U. S. Federal board for vocational education.** The training of teachers of vocational agriculture. Washington, Government printing office, 1919. 47p. 8°. (Bulletin no. 27, Agricultural series no. 5, January 1919.)
511. **Walker, E. G.** Psychology in the normal school. Ohio educational monthly, 68: 81-86, March 1919.

Objects to psychology as a required subject in normal schools where students are trying to fit themselves within one year's time for specific tasks requiring a large amount of technique and subject matter.

HIGHER EDUCATION.

512. **American association of university professors.** Report on requirements for Ph. D. degree, report on pensions and insurance, list of officers and members, constitution. Boston, Pub. by the Association, 1919. 91 p. 8°. (Bulletin of the American association of university professors, vol. 5, no. 1, 2, January-February 1919.) (H. W. Tyler, secretary, Massachusetts institute of technology, Boston, Mass.)
513. **Ansell, Samuel T.** The college man and the new army. Harvard alumni bulletin, 21: 399-401, February 20, 1919.

An address delivered at the annual dinner of the Harvard club of Washington, on January 28, 1919, on the place and influence of the college man in the recent war.

514. **Chittenden, Gerald.** The point of view of youth. Scribner's magazine, 65: 283-88, March 1919.

Comments on present methods and prospects of higher education in America.

515. **Kelly, Robert Lincoln.** The college, the great war, and democracy. Bulletin of the Board of education of the Methodist Episcopal church, South, 8: 139-45, February 1919.

An address delivered before the Educational conference, Lake Junaluska, N. C., July 12, 1918.

516. **Nelson, C. Ferdinand.** The pursuit of health in university life. Graduate magazine, 18: 134-39, February 1919.
517. **Van Wagenen, M. J.** The university student as revealed by the army test. Minnesota alumni weekly, 18: 7-11, March 10, 1919.

Results of the army mental tests given to the students of the University of Minnesota. Shows to what degree the army tests meet the demands of the university.

SCHOOL ADMINISTRATION.

518. **Alexander, Carter.** School statistics and publicity. Boston, New York, Silver, Burdett and company [1919] xix, 332 p. 12°. (Beverly educational series, ed. by W. W. Charters.)

This text is directed upon the problem of making the school superintendent's report readable by his community. The author attacks the whole problem from the collecting of the data and their statistical treatment, to the presentation of the findings in simple and graphic form. The book is illustrated with graphs and tables.

519. **Brown, Keith C.** The essentials of a supervisor of public school music. Journal of education, 89: 263-64, March 6, 1919.
520. **Martin, A. S.** State or national control of education. American school board journal, 58: 24, March 1919.

Suggests the advantages and the disadvantages that the passage of the bill to provide for a department of education will bring to Pennsylvania. Says that "It has not been demonstrated that the Department of education of the United States can direct and control any of the educational activities of the states to a better advantage than the states themselves."

521. Power, Leonard. A plan for the supervision of instruction by principals of elementary schools. *Elementary school journal*, 19: 408-18, February 1919.

Discusses the supervision of geography during the first two weeks of February. A plan put into operation in the Austin school, Dallas, Tex.

522. Pyle, J. Freeman. The legal basis of school finance in the cities of the North central association having a population ranging from thirty thousand to fifty thousand. *Elementary school journal*, 19: 445-67, February 1919.

Says that it would be best for the board of education to have the power to determine the size and the distribution of the school budget.

523. Wagner, Charles A. Productive supervision of teaching. *American school board journal*, 58: 25-27, March 1919.

The apportionment of time between teaching and supervision, the distinctive duties of the teacher-supervisor, etc.

SCHOOL MANAGEMENT.

524. Breed, Frederick S. Measured results of supervised study. *School review*, 27: 186-204, March 1919.

Results of an investigation conducted by the Michigan schoolmasters' club some three years ago. Light was sought on the effectiveness of "a common form of organization of supervised study, viz., that exemplified in the divided-period plan and the double-period plan." To be continued.

525. Cast, G. C. Selecting textbooks. *Elementary school journal*, 19: 468-72, February 1919.

In a school system where the percentage of inexperienced and poorly equipped teachers is as high as it is in this country, the textbook ought to be as comprehensive as possible, so as to enable bright scholars to master a given subject, even without much assistance from an instructor.

526. Ford, Edson L. The unit system of grading and promotion. *Education*, 39: 380-402, March 1919.

Says that the system teaches thoroughness; provides for a retarded, rapid, individual advancement, saving much time; reduces the number of subjects that each child has to carry in his mind at one time, but allows for a wide divergency during course, etc.

527. Jaggard, Guy H. Improving the marking system. *Educational administration and supervision*, 5: 25-35, January 1919.

An experiment in the improvement of teachers' marks in the public schools of Lawrence, Kansas.

528. Perry, Arthur C. The management of a city school. Rev. ed. New York, The Macmillan co., 1919. viii, 434 p. 12°.

A complete revision of the 1908 edition. The plan of organization of the original edition has been retained; but the text has been liberally reapportioned and supplemented, the citations brought to date, and topical headings introduced.

529. Simpson, Mabel E. Supervised study as applied to history. *Journal of the New York state teachers' association*, 6: 4-12, February 1919.

530. Smith, R. B. Supervised study in the Joliet township high school. *American school board journal*, 58: 33, 80, March 1919.

The plan described and arguments in its favor.

SCHOOL HYGIENE AND SANITATION.

531. Andress, J. Mace. Health education in rural schools. Boston, New York [etc.] Houghton Mifflin co. [1919] 321 p. illus. 12°.

532. Harman, N. Bishop. Sight-saving schools. *Child* (London) 9: 198-207, February 1919.

Arrangement of schoolrooms so that sight of pupils will be conserved. Work for myopic children.

533. Legee, Robert T. Child hygiene of the school period—a teacher's problem. *Journal of education*, 89: 214-16, February 20, 1919.

PHYSICAL TRAINING.

534. American physical education association. Western district. First annual convention. *American physical education review*, 24: 65-95, February 1919.

Contains: 1. A. D. Browne: Physical education in the light of the present national situation, p. 60-74. 2. R. G. Boone: The place of physical education in the general theory of education, p. 75-82. 3. F. L. Kleeberger: American athletics vs. German militarism, p. 83-89. 4. W. P. Bowen: The influence of the war upon physical education, p. 90-92.

535. National collegiate athletic association. Proceedings of the thirteenth annual convention held at New York City, December 27, 1918. 116 p. 8". (Frank W. Nicolson, secretary-treasurer, Wesleyan university, Middletown, Conn.)

Contains: 1. S. W. Beyer: The value of athletics in the making of soldiers, p. 30-37. 2. G. L. Meylan: Athletics and recreation in the French army, p. 39-44. 3. J. R. Angell: The reconstruction program for physical education in the colleges, p. 44-54. 4. J. E. Raycroft: Suggestions for colleges from the Army experience in physical training, p. 54-62. 5. J. L. Griffith: The War Department commission on training-camp activities: suggestions from the field, p. 62-66. 6. G. L. Fisher: Report of a discussion in the Athletic research society on reconstruction of college athletics, p. 67-68. 7. T. A. Storey: Universal physical education and the National collegiate athletic association, p. 69-71.

536. Fisher, George J. Points of emphasis in a post-war program of physical training. *Physical training*, 16: 700-18, February 1919.

Paper read at meeting of Athletic research society, December 26, 1918.

537. Rath, Emil. General pedagogy of physical education. *Mind and body*, 25: 454-58, February 1919.

538. Storey, Thomas A. [Address] to a graduating class in physical education. *American physical education review*, 24: 96-106, February 1919.

Presented before the graduating class of the New Haven normal school of gymnastics, June 7, 1918.

Suggestions that may help teachers of physical education to accomplish results that are worth while, to reach standards that are worthy, and to attain an effectiveness that will mean real success in life work.

SOCIAL ASPECTS OF EDUCATION.

539. Chorprenning, Charlotte B. Putting on a community play. *Quarterly journal of speech education*, 5: 31-44, January 1919.

Says that to set up making money as the chief aim of recreation "poisons the wells of community life." Self-sustaining community plays, music, etc., should be fostered. Shows how to select a play and mount it. Illustrated.

540. Church, Clarence C. Social studies in high schools. *American schoolmaster*, 12: 54-63, February 15, 1919.

541. McConaughy, James L. The home and the school. *Journal of education*, 89: 288-80, March 13, 1919.

The ways in which the home can cooperate with the school.

542. **Moore, Harry H.** A high school course in sociology. Educational review, 57: 181-93, March 1919.

Value of sociological study in high schools. Relating ideas of students to real life—politics, poverty, unemployment and other social conditions. Dwells on the ignorance of the average high-school pupil as regards the great problems of the day.

543. **Popenoe, Paul and Johnson, Roswell Hill.** Applied eugenics. New York, The Macmillan company, 1918. xii, 459 p. illus. 8°.

Some interesting topics treated in this book are the following: Intellectual differences among men; Inheritance of mental capacities; Eugenic aspects of an increasing marriage rate and an increased birth-rate for the superior, with statistics of college men and women in this connection; Relation of eugenics to compulsory education, vocational guidance and training, pedagogical celibacy, etc.

544. **Todd, Arthur James.** Theories of social progress; a critical study of the attempts to formulate the conditions of human advance. New York, The Macmillan company, 1918. xii, 579 p. 8°.

This book holds that human progress is to be through discovering and utilizing new types of education. It includes a chapter on Some educational implications of social progress, p. 505-34.

545. **Williams, Joseph T.** The teacher as a social worker. Education, 39: 425-30, March 1919.

Teacher should not only instruct, but give attention to factors having to do with the pupil's health and bodily powers, and with his home and community influences.

CHILD WELFARE.

546. **National child labor committee.** Fourteenth annual conference of child labor. State programs for legislation. New York, National child labor committee, 1919. p. 227-95. 8°. (Child labor bulletin, vol. 7, no. 4, February 1919.)

Contains: 1. Federal aid to elementary education [by] G. D. Strayer, p. 241-43; [by] D. B. Waldo, p. 243-45. 2. L. E. Holt: The child health organization, p. 245-47. 3. W. S. Small: The nation's need of physical education, p. 248-49. 4. E. N. Clopper: State programs for legislation, p. 203-81. 5. New Federal child labor measures, p. 283-85. 6. Sugar beets and education, p. 280-88.

547. **Ravenhill, Alice.** The content of a college course on child welfare. Journal of home economics, 11: 70-76, February 1919.

Presented at the eleventh annual meeting of the American home economics association, Chicago, June 1918.

548. **Titzel, Mary Elizabeth.** Building a child-welfare program in war time. American journal of sociology, 24: 411-22, January 1919.

An account of the Children's year program of the Children's bureau of the U. S. Department of labor.

RELIGIOUS EDUCATION.

549. **Bouquet, A. C.** Some suggestions about religious education. Church quarterly review (London), 87: 235-52, January 1919.

550. **Bower, William Clayton.** A survey of religious education in the local church. Chicago, Ill., The University of Chicago press [1919] 177 p. 16°.

551. **Campagnac, E. T.** Elements of religion and religious teaching. Cambridge, At the University press, 1918. 127 p. 12°.

MANUAL AND VOCATIONAL TRAINING.

552. **Montgomery, Louise.** Vocational education—a vestibule. Survey, 41: 830-31, March 8, 1919.

553. **West, Andrew F.** The true relation of vocational and general education. Manual training magazine, 20: 227-31, March 1919..

An address delivered January 16, 1919, at Chicago, before the Vocational education association of the Middle West.

554. **West, B. D.** Manual training in the junior-senior high school. Manual training magazine, 20: 231-36, March 1919.

VOCATIONAL GUIDANCE.

555. **Book, William F.** War work of vocational psychologists and its significance for vocational education. Educator-Journal, 19: 365-71, March 1919.

Address delivered before the second annual state conference on vocational education, held at Indianapolis, Indiana, February 6, 1919.

556. **Chapman, J. Crosby.** Mental tests in industry. Personnel, 1: 1, 9, March 1919.

Field of usefulness for the mental test in industry.

557. The measurement and utilization of brain power in the army. Science, 44: 221-26, 251-59, March 7, 14, 1919.

Psychological research work in the army. Methods of measuring intelligence, etc. Published with the approval of the Surgeon general of the army, from the section of psychology. Second paper illustrated with graphs.

AGRICULTURAL EDUCATION.

558. **Davenport, Eugene.** Wanted: a national policy in agriculture. Rev. ed. Urbana, Ill., January 1919. 28 p. 8°.

Address of the president of the Association of American agricultural colleges and experiment stations, Baltimore meeting, January 8, 1919.

The speaker advised the Association to memorialize Congress and the President to appoint a permanent agricultural commission, a recommendation which was endorsed by the Association.

559. **Jardine, W. M.** Inaugural address of the president of the Kansas state agricultural college. School and society, 9: 309-17, March 15, 1919.

The present and future mission of the Kansas state agricultural college.

SCHOOL GARDENS.

560. **Ivins, Lester S.** Past results and future plans of U. S. garden army. Ohio teacher, 39: 240-41, February 1919.

COMMERCIAL EDUCATION.

561. **Gowin, Enoch Burton.** The selection and training of the business executive. New York, The Macmillan company, 1918. 225 p. 12°.

562. **Keyes, Rowena K.** Literature and composition for commercial pupils. English journal, 8: 81-89, February 1919.

Work accomplished in the Girls' high school, Brooklyn, N. Y. Gives pupils' lists of their reading for three terms.

PROFESSIONAL EDUCATION.

563. American conference of pharmaceutical faculties. Proceedings of the nineteenth annual meeting, Chicago, Ill., August 12-13, 1918. 161 p. 8°. (Theodore J. Bradley, secretary-treasurer, College of pharmacy, Boston, Mass.)

564. **Ballantine, Henry W.** The place in legal education of evening and correspondence law schools. American law school review, 4: 369-78, February 1919.

Says that correspondence schools should not be permitted to grant any degree in law. They should be inspected and classified so that fraud and dishonesty may be exposed.

565. Black, William M. The training required for engineers. *Engineering education*, 9: 187-206, February 1919.
Discussion: p. 206-44.
Major General Black, chief of engineers of the U. S. Army tells of the training required for army engineers.
566. The movement for shorter hours in nurses' training schools. *American journal of nursing*, 19: 439-48, March 1919.
567. Spencer, Selden P. Pre-legal education. *American law school review*, 4: 366-68, February 1919.
Advocates the necessity of general education as a pre-requisite to study of the law.
568. Vincent, George E. The university and public health. *Science*, 44: 245-51, March 14, 1919.
Abstract of an address delivered at the anniversary exercises of Johns Hopkins University, February 22, 1919.
Service of the university in supplying a trained personnel for public-health administration.

CIVIC EDUCATION.

569. Dana, John Cotton. Training a city in civics. *American city*, 20: 239-40, March 1919. City ed.
An account of what the Newark public library has done to promote Newark study in the public schools of that city.
570. Davidson, Percy E. Some reasons for the state direction of civic-economic training particularly in schools of secondary grade. *Berkeley, Cal.*, 1919. [6] p. 8°.
Reprinted in part from the *Sierra educational news*, February 1919.
571. Gathany, J. Madison. The teaching of politics. *Educational review*, 57: 247-59, March 1919.
Importance of civics in our public school curriculum. Says that the average man in our democracy must be fitted to understand and comprehend sound ideas of government, or American democracy will cease to exist, and something akin to Bolshevism will usurp its place.
572. The teaching of politics in American universities. *New republic*, 18: 134-35, March 1, 1919.
An editorial criticizing current methods of teaching this subject, because forms are studied without analyzing the substance behind those forms. Attention is given to acquiring facts rather than to grasping principles.

AMERICANIZATION OF IMMIGRANTS.

573. Kilpatrick, Van Evrie. Americanization through school gardens. *American education*, 22: 309-11, March 1919.
574. Weber, S. F. Some aspects of Americanism. *Journal of education*, 89: 227-29, February 27, 1919.

REEDUCATION OF WAR INVALIDS.

575. Inter-allied conference on the after-care of disabled men. Second annual meeting held in London, May 20 to 25, 1918. [Vol. I] Reports presented to the conference. [Vol. II] Supplement to volume of reports. London, H. M. Stationery office, 1918. 2 v. 8°.
CONTENTS.—[Vol. I] Section 1, Pensions and allowances. Section 2, Training. Section 3, A, Medical treatment, the blind and the deaf. Section 3, B, Surgical treatment. Appendix. [Vol. II] Verbatim reports of the discussions, together with some papers presented to the conference but not included in the volume of reports.
576. McMurtrie, Douglas C. The disabled soldier. With an introduction by Jeremiah Milbank. New York, The Macmillan company, 1919. 232 p. front, plates. 12°.

577. **Paeuw, Leon de.** The vocational re-education of maimed soldiers. With a preface by Madame Henry Carton De Wiart, tr. into English by the Baronne Moncheur and Elizabeth Kemper Parrott. Princeton, Princeton university press; London, Humphrey Milford [etc., etc.] 1918. 188 p. plates. 12°.
578. **Peirce, Paul S.** Disabled men in war and peace. National efficiency quarterly, 1: 273-80, February 1919.
A program for industrial readjustment of the disabled.

EDUCATION OF SOLDIERS.

579. **Barker, Clyde B.** An army school for illiterates. American school board journal, 58: 53, March 1919.
The organization of classes and the method of instruction used in the classes for illiterate soldiers.
580. **Kingsbury, John A.** The new military training. Survey, 41: 705-07, March 1, 1919.
Preparing soldiers abroad for citizenship at home. Work of the Army educational commission.

EDUCATION OF WOMEN.

581. **Abernethy, Julian W.** The anomaly of coeducation. School and society, 9: 259-62, March 1, 1919.
The writer does not believe in coeducation in colleges and universities. Says that it is time for a revolution that will give to a woman a man's chance in education.

EDUCATION OF DEAF.

582. **Farquhar, Grover C.** The Boy Scouts of America in relation to schools for the deaf. American annals of the deaf, 64: 134-44, March 1919.

EXCEPTIONAL CHILDREN.

583. **Clark, L. Pierce.** The ungraded class system which New York is about to put in operation. Journal of the New York state teachers' association, 6: 1-4, February 1919.
Gives the requirements of any thoroughgoing ungraded class system for the state.
584. **Tompkins, Ernest.** Left-handedness and stammering. Quarterly journal of speech education, 5: 6-11, January 1919.
Says the belief that reversal of left-handedness causes stammering is fallacious. The charge that return "to left-handedness results in disappearance of stammering is not sustained by three prominent supporters of the dextro-sinistrality causation theory of the disorder."

EDUCATION EXTENSION.

585. **Nalder, F. F.** The value of correspondence instruction.—Part I. American education, 22: 306-309, March 1919.
To be continued.
586. **Snedden, David.** The movement for continuation school education. Educational administration and supervision, 5: 36-38, January 1919.
Notes of an address before the Vocational education association of the Middle West, January 16, 1919.

LIBRARIES AND READING.

587. **Christopher, Katharine M.** War service of the New York high school libraries. *Journal of the New York state teachers' association*, 6: 19-22, February 1919.

Collecting and arranging library war material, Arousing pupils' interest in war service and reading, and Student contribution to soldier and sailor libraries.

588. **Michigan state normal college.** Training department library. A graded list of library books for the elementary and the intermediate school. Ypsilanti, Mich., 1919. [12] p. 8°. (Library bulletin no. 3)

Arranged by E. V. Andrews, librarian, with the help of the teachers and the children of the Training department.

589. **Paine, Paul M.** Are we to have a free library? Some observations upon the conduct of the people's university. *Bookman*, 49: 68-71, March 1919.

Criticizes the classification of a library's book circulation into fiction and non-fiction. Says it will be interesting to ascertain what books on applied science and American idealism are most popular, and also to give proper attention to statistics of prose fiction.

BUREAU OF EDUCATION: RECENT PUBLICATIONS.

590. Brief courses in home making for normal schools; by Carrie Alberta Lyford. Washington, 1919. 15 p. (Home economics circular no. 8, January 1919.)

Revision of circular issued June 27, 1917.

591. The cooperative school; by William T. Bawden. Washington, 1919. 10 p. (Industrial education circular no. 2, February 1919.)

592. Courses of study for the preparation of teachers of manual arts; by Albert F. Siefert. Washington, 1919. 30 p. (Bulletin, 1918, no. 37)

593. Diet for the school child. Washington, 1919. 14 p. (Health education, no. 2)

594. Instruction in music; by Waldo S. Pratt. Washington, 1919. 14 p. (Bulletin, 1919, no. 5)

Advance sheets from Biennial survey of education in the United States, 1916-1918.

595. The kindergarten and Americanization. Washington, 1919. 4 p. (Kindergarten circular, no. 3, November 1918.)

596. Kindergarten supervision in city schools; by Almira M. Winchester. Washington, 1919. 50 p. (Bulletin, 1918, no. 38)

597. Lessons from the war and their application in the training of teachers; by William T. Bawden. Washington, 1919. 20 p. (Industrial education circular no. 1, January 1919.)

598. List of references on rural life and culture. Washington, 1919. 7 p. (Library leaflet no. 1.)

599. Secondary education; by Thomas H. Briggs. Washington, 1919. 44 p. (Bulletin, 1918, no. 47)

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By

**DIRECTOR OF THE DEPARTMENT OF EDUCATION
BOY SCOUTS OF AMERICA**

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EDUCATIONAL WORK OF THE BOY SCOUTS.

By **LORNE W. BARCLAY.**

Director of the Department of Education, Boy Scouts of America.

CONTENTS.—The scout movement.—Democratic character of the movement.—Nonsectarian and non-partisan.—Scout leaders.—The plastic age.—Growth and extent of the movement.—Scouting and education.—The scout program.—Scouting and the public schools.—Scouting courses in colleges and universities.—The department of education.—Scout handbooks, etc.—The library department.—Scouting and the movies.—Scouting and war service.—Scouting and juvenile delinquency.—Scouting and soldier making.

THE SCOUT MOVEMENT.

The scout movement makes no claim to supersede the work of home or school or church. On the contrary, it aims to supplement these institutions and to cooperate with them in every practicable way in a sane, all-around development of American youth. Scouting has been described as the process of making real boys into real men by a real program that works. This program is adapted to the boy's leisure hours, but its principles are the kind that permeate every phase of his life, becoming part and parcel of himself. Character development is the keynote of scouting. By precept and practice it instills ideals of courage and honor, cheerfulness and kindness, loyalty and obedience, cleanliness of mind and body, faithfulness to duty, devotion to country, reverence to God. By his oath the scout pledges himself to "help other people at all times," to keep himself "physically strong, mentally awake, morally straight."

He is a better son and brother, a more alert student, a heartier adherent to the church of his affiliation because he is also a good scout. Later on he will be a more responsible and valuable American citizen for his scout training now.

DEMOCRATIC CHARACTER OF THE MOVEMENT.

Scouting knows no bounds of class, or creed, or race. It speaks the universal language of world boyhood. It is the great melting pot of American youth. It aims not to run every boy into one groove, but to help every boy to develop into the fullest manhood of which he is capable, an individual in the truest sense, with recognized responsibility to himself and society.

NONSECTARIAN AND NONPARTISAN.

The scout movement is nonsectarian and attempts no formal religious instruction. Nevertheless, its ideals are in substantial accord with those of the modern church, in their emphasis upon the

service of God, the brotherhood of man. Though having no sectarian bias, the movement numbered among its scoutmasters in 1917, 1,394 Sunday school teachers, 964 Y. M. C. A. workers, and 103 ministers; 7,319 troops were on record in 1917 as organized under the jurisdiction of religious institutions. Thus the cordial mutual relation between the church and the Boy Scouts of America is attested.

From the beginning the Boy Scouts of America was conceived and has since been developed on the broadest possible lines. The movement has kept itself free from all party or political predilections, though holding itself ready at all times to cooperate cheerfully with all institutions and causes dedicated to community and national welfare. Its sponsors are men representing the widest variety of interests, viewpoints, and professions.

SCOUT LEADERS. .

Scoutmasters and their assistants are chosen with great care, for the movement recognizes the importance of the quality of leadership offered, and that the success or failure of the scout program in a given troop must depend to a considerable degree upon this leadership.

A scoutmaster must be at least 21 years of age, of proved moral worth and patriotism. He must be an American citizen (or must have taken legal steps to become such) and must be willing to subscribe to the Scout Oath and Law. He must have some experience in boy work and is preferably an "outdoor man," with a fund of nature lore and campcraft at his disposal. Above all, he must be a man of strong personality, with power to command the respect and liking of his boys. He must be the kind of man who practices good scouting as well as preaches it.

THE PLASTIC AGE.

Twelve years is the minimum age requirement for scouts. Fifteen and a half is the average scout age. Boys of 18 or over are encouraged to stay in the movement as assistant scoutmasters, or as associate or veteran scouts. The fact remains, however, that the boy in the early teens is the one with whom the scoutmaster has largely to deal. This means that the boy is in the scoutmaster's hands, in very close personal relationship at the most impressionable and plastic period of his development, when he is most susceptible to influences, good and bad, when the imagination is most open to appeal, when hero worship is the very breath of life.

GROWTH AND EXTENT OF THE MOVEMENT.

Scouting was started in the United States in 1910. In the eight years since a far-sighted group of men met to consider ways and means by which the scout movement could be adapted to meet the needs of American boys progress of the movement has been little short of phenomenal.

There is to-day not a single State, and scarcely a county, in this country in which the movement is not firmly established. In crowded cities, in the small village, in isolated rural communities, scouting is solving the ever present and ever complex boy problem, and solving it effectively. On September 6, 1918, 343,248 scouts were registered at national headquarters, an increase of over 82,000 since the 1st of January of the same year and of nearly 100,000 since the same date of the previous year.

War time made heavy inroads on scout leadership, but even so, in September, 1918, there were 89,640 adult scout leaders on record, which means that over 89,000 American men believe sufficiently in scouting and the scout program to give it their personal sponsorship, time, interest, and leadership.

SCOUTING AS EDUCATION.

Dean Russell, of Columbia University, claims that the movement is the "most significant educational contribution of our time," with a "program that appeals to a boy's instincts and a method adapted to a boy's nature."

The scout method is the laboratory method. It is learning by doing. It gives the boy a host of interesting worth-while things to do at the time when he is most restless and pines most for activity. Moreover, it gives him something he likes to do. It is learning made attractive. It works along the line of normal boy interests and activities. It interprets and gives life and meaning to what might otherwise be dry-as-dust book stuff. It is an eye opener in a hundred directions.

Scouting is literally education. It does not aim to plaster something on from outside. It draws out and cultivates what is already latent within the boy. It provides an outlet for his exuberant energy. It gives direction to his random impulses and crude abilities. It shows him the why and how of things. It makes use of his love of adventure, his chivalry, his passion for outdoors. It teaches him to use his eyes and ears and hands and feet to the best advantage. Above all, it teaches him to use his head.

A scout learns to take care of himself and the other fellow. He knows what to do in case of accident and how to prevent accident. He knows how to build fires in the open, even in wet weather and without matches. He knows how to pitch a tent and how to make himself comfortable under the open sky. He knows how to find his way by night or day in the woods without a compass. He understands fire fighting and fire prevention. He knows the laws of health and obeys them, follows "safety-first" rules himself, and looks after the other fellow who doesn't. He practices signaling and craftsmanship. He studies nature, animate and inanimate. He ties knots that hold. His fires burn. His stews are edible. He learns to do things not

"somewhere near right" but just right. The emphasis is on thoroughness, efficiency, out-and-out trained skill. The scout is deft, quick-witted, level-headed, resourceful. In short, he is "prepared."

There are no "don'ts" in scouting. It is all "do." Perhaps that is the secret, at least one of the secrets, of its success as an educational method. And all the while he is having a real boy good time, hardly aware he is being taught at all. Scouting is recreation plus education. As a school principal once said, "Scouting has done what no scheme has ever done before—made the boy want to learn."

THE SCOUT PROGRAM.

ITS ADAPTABILITY.

One of the chief excellencies of the scout program is its adaptability. It was not devised for a particular type of boy—a city boy, a country boy, a boy with a full purse, a boy with empty pockets, a boy with wise parents, a boy whose home is the street, or the reformatory—but all kinds of boy, any kind of boy, the scout program fits, if rightly applied by a true leader and lover of boys.

ITS PROGRESSIVE QUALITY.

The scout program is progressive and provides its own rewards and incentives for advancement. The scout is always trying to beat his own record. There is no standing still. There is always something just ahead to conquer and achieve. Having passed the tenderfoot stages, the boy goes on to master the second-class scout requirements and after these to the more complicated and difficult attainments of the first-class scout.

MERIT BADGE POSSIBILITIES.

The first-class scout has by no means reached the summits of scouting. The Merit Badge possibilities for further development are practically limitless. They are the electives of scouting, so to speak. They offer 58 different subjects for intensive study, covering such widely diversified boy interests as photography, beekeeping, taxidermy, signaling, astronomy, sculpture. The plan of the Merit Badges is not meant to develop specialists, but to provide an opportunity for every boy to follow up his hobbies and try out his natural gifts and aptitudes. There is something here for boys of every bent of mind. If along the line of any of these subjects the boy finds his destined vocation so much the better. What is perhaps more likely to happen is that the Merit Badge program will have opened the boy's eyes to an almost endless variety of interesting possibilities for side studies and avocations. Merit Badges studies are open gateways to wide fields, which the scout may explore at will.

Merit Badge awards (comparative table).

For—	1917	1916	1915	1914	1913	1912	1911
Swimming.....	1,898	1,343	993	610	441	177	10
Personal health.....	1,871	1,158	871	910	698	236	15
Public health.....	1,831	1,080	836	759	576	225	9
Firemanship.....	1,735	1,092	777	660	202	85	9
First aid.....	1,707	1,018	666	470	165	69	2
Craftsmanship.....	1,236	686	596	474	278	75	1
Carpentry.....	1,119	649	440	221	76	25	.....
First aid to animals.....	1,001	554	333	294	102	31	.....
Pioneering.....	996	488	359	202	81	23	.....
Camping.....	919	392	374	307	161	52	1
Safety first.....	908	151	.....	.....	.....	.....	.....
Handicraft.....	872	426	443	449	135	53	1
Pathfinding.....	815	516	355	250	121	43	1
Cooking.....	811	490	418	361	163	44	2
Life-saving.....	792	532	379	359	234	72	3
Cycling.....	755	392	394	329	166	55	6
Civics.....	735	390	350	307	179	50	3
Scholarship.....	699	398	333	197	10	.....	.....
Athletics.....	617	297	246	135	54	38	.....
Electricity.....	599	259	226	126	58	23	1
Signaling.....	487	271	229	131	93	22	3
Bird study.....	434	231	162	36	4	2	.....
Machinery.....	326	215	177	188	73	25	.....
Physical development.....	311	193	184	5	.....	.....	.....
Automobiling.....	299	124	108	94	47	16	.....
Gardening.....	239	171	141	227	126	56	.....
Interpreting.....	228	130	141	112	52	27	3
Music.....	188	129	125	118	58	27	2
Bugling.....	179	116	83	87	155	13	.....
Poultry farming.....	173	89	68	94	61	23	2
Masonry.....	168	75	60	102	19	14	.....
Conservation.....	164	139	96	100	31	15	1
Marksmanship.....	158	106	88	75	34	12	.....
Chemistry.....	158	69	88	128	62	23	2
Forestry.....	153	102	105	121	151	21	.....
Art.....	122	75	93	156	74	31	1
Painting.....	113	49	66	100	45	16	.....
Horsemanship.....	105	42	37	83	60	27	.....
Blacksmithing.....	92	50	41	23	6	.....	.....
Business.....	92	71	102	156	82	26	.....
Photography.....	76	14	28	46	15	9	.....
Surveying.....	72	38	51	90	54	15	.....
Mining.....	68	27	29	26	26	6	.....
Printing.....	62	33	26	33	24	5	.....
Agriculture.....	62	31	30	7	5	6	.....
Architecture.....	38	20	21	65	21	7	.....
Dairying.....	38	8	15	21	9	1	.....
Astronomy.....	36	25	32	156	96	38	5
Plumbing.....	33	12	29	75	8	5	.....
Seamanship.....	28	26	37	57	31	11	.....
Aviation.....	23	18	12	16	9	4	.....
Bee farming.....	19	19	39	214	62	25	.....
Leather working.....	19	17	14	55	15	.....	.....
Stalking.....	15	6	4	3	4	1	.....
Angling.....	15	.....	8	3	1	.....	.....
Taxidermy.....	10	8	7	2	7	1	.....
Sculpture.....	6	2	10	36	10	1	.....
Archery.....	3	.....	1	2	.....	.....	.....
Invention.....	.....	.....	1	8	1	.....	.....
Total.....	26,728	16,050	11,976	10,499	5,521	1,906	83

The table shows the increase of Merit Badges awarded during six years of scouting.

It is interesting to note that after swimming, a larger number of scouts qualified for Merit Badges in personal and public health than in any other subject offered. The requirements in these two subjects are here given as an illustration of the thoroughness and scope of the work demanded.

To obtain a Merit Badge for personal health, a scout must:

1. Write a statement on the care of the teeth, and show that his teeth are in good condition as a result of proper care.
2. State a principle to govern in eating; and state in the order of their importance five rules to govern the care of his health.

3. Present satisfactory evidence that he has not been absent from school or work for a period of at least six months as a result of his failure to observe these rules.
4. Tell the difference in effect of a cold and a hot bath.
5. Describe the effects of alcohol and tobacco on the growing boy.
6. Tell how to care for the feet on a march.
7. Describe a good healthful game and state its merits.
8. Describe the effects of walking as an exercise.
9. Tell the dangers of specialization and overtraining in the various forms of athletics, and the advantages of an all-round development.

To obtain a Merit Badge for public health, a scout must:

1. State the chief causes and modes of transmission of each of the following diseases: Tuberculosis, typhoid, malaria.
2. Draw a diagram showing how the house fly carries disease.
3. Tell what should be done to a house which has been occupied by a person who has had a contagious disease.
4. Describe the method used in his community in disposing of garbage.
5. Tell how a city should protect its milk, meat, and exposed foods. State what are the laws in his community covering this subject, and to what extent they are being enforced.
6. Tell how to plan the sanitary care of a camp.
7. State the reason why school children should undergo a medical examination.
8. Tell how he may cooperate with the health authorities in preventing disease.
9. Produce satisfactory evidence that he has rendered service in some effort recommended by the public health authorities in the interest of public health.

When one considers that in one year nearly 2,000 scouts qualified for Merit Badges in each of these important subjects, the cumulative effect upon the general health, hygiene, and sanitation of the Nation at large, can hardly be overestimated. This is but one of many phases of scouting education but a vastly significant one.

It is noticeable that firemanship and first aid follow next in popularity, both of them subjects the intelligent study and practice of which are of incalculable service in the prevention of and coping with emergencies, education of the most practical and invaluable sort.

ADVANCED SCOUTING.

A first-class scout who passes, to the satisfaction of the local Court of Honor, Merit Badge tests in first aid, physical development or athletics, personal health, public health and life saving becomes a life scout. A life scout who passes five additional Merit Badge tests becomes a star scout. A first-class scout who passes the tests in first aid, life saving, personal health, public health, cooking, camping, civics, bird study, pathfinding, pioneering, athletics or physical development with 10 additional tests becomes an eagle scout.

These requirements are sufficiently rigorous and demand a considerable amount of specialized training as well as perseverance, determination, and enthusiasm. That boys count the gains worth the pains the facts prove. In 1917, 529 scouts qualified as life scouts, 508 as star scouts, and 219 as eagle scouts.

SCOUTING AND THE PUBLIC SCHOOLS.

In 1917, 2,237 troops of Boy Scouts were organized in connection with schools, and 1,557 scoutmasters were also school-teachers, statistics that show the entire compatibility of scouting with other educational interests.

All over the country schools are following Dr. Eliot's hint that the "Boy Scout movement is setting an example that our whole public-school system ought to follow."

In the high school of Austin, Tex., the Boy Scouts' Handbook is used as a textbook, and scouting may be credited toward graduation, as per specific and detailed conditions set forth in the official course of study. The State University of Texas offers annually three scholarships to Boy Scouts who have attained the rank of eagle scout. This is a type of close correlation of scouting with the public-school system, which is on the increase, and which is most desirable from the standpoint both of the school and of the Boy Scout movement.

Toledo, Ohio, and Chicago, Ill., are among the cities wherein boards of education have by formal resolution, indorsed scouting and recommended its incorporation into the school program.

In Hartford, Conn., the problem of coordination between the scout movement and the public schools was complicated by the system under which the schools are operated. This system places a committee of three in charge of each school, so that besides winning the approval of the board of education, the movement had to meet and overcome a different set of objections or prejudices with each school, and yet scouting is established in 71 per cent of the public schools in Hartford.

Portland, Oreg., is another city in which scouting is strongly entrenched as an extra school program, the troops meeting in the school buildings, without charge by the board of education for heat, light or janitor service. School swimming tanks have been turned over to the scouts certain evenings of the week, as a result of which 200 scouts were taught to swim. Scouts have voluntarily taken charge of playgrounds, have kept order in the halls of the schools, taken charge of fire drills, and of the raising and lowering of flags on school buildings, have given supervision in lavatories, and made themselves generally helpful. On the other hand, the local Boy Scout organization has actively cooperated with the schools to raise the standard of scholarship, by giving a gold and enameled button to each scout who attained an average of 85 per cent in school studies, or to each scout who improved upon his previous month's record, no matter how poor the record. This button could only be retained from month to month, by meeting the conditions named above. If at the end of the school year it was still in the scout's possession he became the permanent owner of the emblem.

The fact that but one button was forfeited indicates the stimulative value of this cooperation.

The limitations of this report preclude a more extended statement of this development of scouting, but the geographical distribution of the cases cited suggests that the incorporation of scouting in the public schools is not limited to a particular section, but is a very general development.

The following points characterize most troops organized in connection with public schools:

1. Scouting is voluntary on the part of the scout leader and the boy.
2. Scouting is a supplementary activity to the regular school program, the church, and the home.
3. The program of scouting is so planned by the scoutmaster as to cover as much of the boy's leisure time as possible, especially during the period when the scout is acting under the direction of the leader, or when he is practicing scouting on his own initiative.
4. The play spirit should characterize scouting.
5. The formalism of school programs should not be imposed upon scouting. In its flexibility, freedom of choice, and adaptability to individual needs, preferences, and abilities rests much of the appeal of the scouting program.
6. Scouting comprises a set of activities in which the boy is anxious to participate, and which have behind them the principles of the Scout Oath and Law.
7. In the leadership of the troop, character building as the end of scouting must be ever kept in mind.

SCOUTING COURSES IN COLLEGES AND UNIVERSITIES.

V Courses in scoutcraft and recreational leadership are offered in many universities and colleges, including the Universities of California, Virginia, Wisconsin, Boston, Columbia, and New York, Reed and Rutgers Colleges and many other schools. These courses are especially designed for the training of scout leaders and others interested in the movement and are planned in cooperation with the National Headquarters Department of Education. They are particularly significant in that they prove that the scout program and method are regarded by authorities as an educational asset.

Boston University offers two \$500 scholarships (1918-19) to students whose major interest is the field of leisure time and vocational occupations for boys of scout age.

THE DEPARTMENT OF EDUCATION.

Since 1916 the Boy Scouts of America has maintained a department of education whose province it is to promote the interests of scouting in schools and universities, to offer leadership and guidance to scout officials in arranging for scout training courses under local councils, to hold conferences throughout the country in matters connected with the educational aspects of scouting. The establishment of this department has helped greatly to rouse popular interest in the movement and to interpret scouting as a community asset.

SCOUT HANDBOOKS, ORGANS, AND OTHER LITERATURE.**THE BOY'S HANDBOOK.**

Since the founding of the scout movement the Boy Scout Handbook has been increasingly in demand. It is already in its seventeenth printing. Two editions of 100,000 each were required in 1917. It is said to be the most popular boys' book in the world and we are told it is not only boys who find its pages worth while, for it is in great demand among the soldiers of our new army, who are given preliminary training similar to that required of scouts. The handbook is the official interpretation of scouting.

SCOUTING AND BOYS' LIFE.

Scouting, the official organ of the movement for scout officials, and Boys' Life, the official scout magazine for boys, also play an important part in interpreting and disseminating scouting.

Boys' Life has an extensive circulation and aims to give boys inspiring and entertaining fiction of the right sort, as well as biography, current history, nature lore, and other worth-while matter attractively presented. A new department conducted by the chief scout executive, "What Every Scout Wants to Know," deals particularly with the war program of the Boy Scouts of America.

Besides these regular publications the editorial, educational, and publicity departments are constantly issuing new pamphlets and articles interpreting the scout movement from educational and other points of view. The war work of the Boy Scouts of America has been so extensive this last year that it has called for a whole set of literature by itself, as well as taking a large proportion of space in Boys' Life and Scouting.

THE LIBRARY DEPARTMENT.

No survey of the educational work attempted by the Boy Scouts of America would be complete without reference to the library department, which is performing an important function in giving leadership to schools and libraries, by making available lists of really worth while boys' books and helping to weed out the cheap and unwholesome so-called "literature" which falls into youthful and indiscriminating hands and sows evil seed.

Every boy's library, the selected list of boys' books which are published in Scout Edition under the supervision of a group of our country's leading librarians, continues in popularity with the boys themselves and has met with so much approbation from libraries that the department is greatly encouraged as to the value of what it is endeavoring to accomplish in giving boys the right sort of reading matter.

SCOUTING AND THE MOVIES.

Another phase of the work of the library department more recently developed is its service as literary adviser to a motion-picture company. As a result of this collaboration a score or more of films have been put into circulation, notably the "Knights of the Square Table," by Chief Sea Scout James A. Wilder, also of Pine Tree fame, and "The Star-Spangled Banner" and the "Unbeliever" (The Three Things), both by Mary Raymond Shipman Andrews. All three of these plays are inspiring, educational, and patriotic, tending to spread ideals of the highest type, as well as containing the human element and a wealth of laughter and tears.

SCOUTING AND WAR SERVICE.

When our country entered the world war the full strength of the Boy Scouts of America was immediately made available "as a potential asset to the country for cooperative effort." The results even exceeded the high expectations of those who had abundant faith in the efficacy of the movement as a community and national factor. With ever-increasing calls for service the Boy Scouts of America have met every demand with credit to themselves and the organization and have come to be recognized as an important adjunct to the national program of war activities.

Immediately upon our entrance into the war a scout coast-guard service was organized and made available for use by the Navy Department should occasion warrant. Important work was also done in locating wireless outfits and rendering other services, details of which may not yet be given, in cooperation with the Naval Intelligence Bureau.

Under the direction and at the invitation of the War Department various services have been rendered. A nation-wide canvass of standing black walnut timber was conducted by scouts for the benefit, respectively, of the Ordnance Department and Bureau of Aircraft Production in the manufacture of gunstocks and propellers. The timber was reported to the Forest Service, which tabulated the results of the census and made it available for the needs of the War Department.

In cooperation with the American Red Cross and under the direction of the Gas Defense Division of the Chemical Warfare Service effective work was done by scouts in collecting fruit pits and nuts for Government use in manufacturing gas masks. Hundreds of tons of the material were collected and in many towns scouts had entire charge of the work, collecting, bagging, checking up, and shipping.

Working under the Committee on Public Information and at the direct request of the President, Boy Scouts have distributed patriotic literature and helped keep the public informed as to various aspects

of our war situation. They also did important distribution and propaganda work under the auspices, respectively, of the Food and Fuel Administrations.

During the summer of 1918 a farm labor canvass for the State of Pennsylvania was conducted by scouts, working under the United States Public Service Reserve, and in many places scouts have made a census and secured lists of available boarding and lodging houses for munition factory and shipyard workers.

Scouts have actively cooperated with all the great patriotic agencies, such as the American Red Cross, Y. M. C. A., Knights of Columbus, War Camp Community Service, etc. They have been ready to answer every call and have done effective work as messengers, guides, clerks, orderlies, ushers, intelligence officers, first-aid instructors and model "patients," canteen workers, cooks, collectors of salvage material, books and magazines. They have, in short, served in hundreds of capacities, making themselves generally useful in community and national work. They are enrolled by thousands as Victory Boys, pledged to "earn and give" in order to insure the well-being and happiness of our men in uniform.

Perhaps the most conspicuous service rendered by the organization is the work done for the Treasury Department in connection with the liberty loan and war-stamps campaigns.

In the first three loan campaigns, serving as "gleaners after the reapers," scouts sold 1 out of every 23 bonds sold throughout the whole country, and this in addition to an immense amount of miscellaneous service rendered to local committees, banks, etc. Final statistics are not yet available as to results of scout participation in the fourth campaign, but returns now in justify the belief that an even higher record of achievement was made.

Using the special red post card printed for their use by the Government, scouts have sold war savings and thrift stamps amounting at the present time to approximately \$40,000,000. It is expected that this sum will reach the \$100,000,000 mark by January 1.

When Mr. Hoover made his plea from overseas to the American people for intensive food production and rigid conservation measures, scouts were among the first to heed the word. Thousands of war gardens were immediately started. In many cases as many as two and three hundred acres were under cultivation by Boy Scouts. This work gallantly begun in the spring of 1917, under the slogan "Every Scout to Feed a Soldier," went on unabated during the 18 months of our participation in the war and will no doubt go on through 1919, since the need for food production will be greater and not less as the months go on. Scouts have spread war-garden and food-conservation propaganda, operated hundreds of thousands of war gardens, worked on farms, in farm camps, in orchard and berry

field, and canning factory, literally adding tons of food produce to our country's resources.

Space does not permit a detailed discussion of work done by scouts in this connection. The story would fill a book in itself. A few instances must suffice.

In 1917 Boy Scouts operated a Government-owned tract of 175 acres and raised a corn and market vegetable crop worth some \$10,000. The land was in a wild state—a tangle of wood and shrubbery when the boys attacked it. They cut down trees, cleared the brush, pulled the stumps and roots, prepared the soil, planted, cared for, and harvested the crop themselves and all the work done was purely voluntary, devoted to soldier feeding, not to gain.

In Portamouth, Ohio, six medals were offered by the city for the six best gardens, and when the announcement of awards was made it was found that, competing with 2,000 gardeners, Boy Scouts had carried off all the six prizes.

During a shortage of labor last year, when an exceedingly valuable potato crop was in danger of going to waste along the Eastern Shore, scouts from Washington, Baltimore, and the vicinity came to the rescue. They were housed in camps, each camp under the charge of a scoutmaster and moving from farm to farm until the work was finished. A scout is prepared.

During the past summer 150 Boy Scouts of Dallas, Tex., with four cooks, four scoutmasters, and a scout executive, undertook and successfully carried out a peach-picking summer camp. The peaches were picked, packed, and shipped, amounting to 76 carloads in all, and the whole job was done by boys under 18, trained, disciplined, under competent leadership, willing and able to work in good earnest in a good cause.

These stories might be duplicated a dozen times, told in terms of strawberries, cherries, corn, apples, and what not. In many cases scouts have gone extensively into the canning and drying industry, often making their own equipment for the purpose. In New York City particularly valuable service was rendered in cooperation with the city kitchen. Scouts helped collect waste from the markets, piers, and terminals, and sorted it for use in the canning and dehydrating work done by the women operating the kitchen.

These manifold services rendered the Nation by scouts during the past strenuous months have been a real contribution to our war-winning program, but what the work has meant to the boys themselves is of even greater significance. The lessons of thrift and self-denial and hard work, of comradeship and loyalty, clean team play, patriotism, and unselfish service have not been learned in vain. His country means more to a Boy Scout because he has worked for it, given to it, served it with might and main. The scout movement

is dedicated to good citizenship making, and in their splendid cooperation with the Nation in its time of stress and strain Boy Scouts have made preparation for future usefulness as American citizens.

SCOUTING AND JUVENILE DELINQUENCY.

The present crisis brings with it the fear that juvenile delinquency may increase here in America, as it has done in the warring nations of Europe, unless effective measures are taken to prevent the evil. Scouting is an effective antidote for the poisons of undisciplined lawlessness. Scouting will supply the leadership made necessary by the departure for war of natural guardians of youth.

Judge Porterfield, of the Kansas City Juvenile Court, says:

If every boy in the city would join the Boy Scouts, the gangs would disappear, the juvenile court would be a stranger to the youth, and we would rear a generation of men that would not require police protection. I have never had a Boy Scout in my court, and there are 1,200 of them in Kansas City.

Dean Russell, of Columbia University, says:

One lesson of the present European war is that American boys must be trained in patriotism and in those homely virtues which would make for civic order and social stability. For this purpose, I know of no means so effective as those employed by the Boy Scouts. I hope to see the time when every American schoolboy will look forward to becoming a good scout and will be trained to incorporate the ideas of the Boy Scout into his life as an American citizen.

Scouting is not a reformatory movement. It was devised for the normal boy, neither very good nor very bad. Nevertheless, it is a very effective instrument for "straightening out crooked sticks." One has only to go to the Glen Mills Station (Pa.) Reformatory, where scouting is doing a splendid work of regeneration, to discover this. One juvenile offender committed to the reformatory and there developed into a first-class scout said recently that he liked being a scout " 'cause it gives a fellow a chance to learn something all the time and help the other fellow." He had the whole spirit of the movement crystallized in his mind. That is what scouting can do, believing as it does that there are no bad boys, but some misdirected boys.

SCOUTING AND SOLDIER MAKING.

The Boy Scout movement has never believed it was a part of its province to develop amateur soldiers. It encourages drill only as a means, not an end, in the interests of quick mobilization, precision of movement, proper posture, and discipline. Its program does not include technical military training. That, it believes, can easily be added later if necessary, built upon the foundation of good health, good habits, efficiency, resourcefulness, loyalty, obedience, and trustworthiness. The scout is trained to responsibility. He knows how to take care of himself and others. He is trained to think quickly

and act quickly in emergency. Therefore, he makes a good soldier, if he is called to fight, just as he makes a good citizen if his duty lies along the ways of peace.

The military training commission of the State of New York accepts scout training as a satisfactory equivalent for the compulsory military training given other boys not members of the organization.

Maj. Gen. Hugh L. Scott says:

The necessary elementary instruction that every young American should have in order to be prepared to play his part in the national defense can be obtained by his work in the Boy Scouts of America.

An English officer once wrote to Lieut. Gen. Sir Robert Baden-Powell, the founder of the scout movement:

I say unhesitatingly as an officer on active service that if you offered me to-day the choice between a trained and efficient cadet and a trained and efficient scout as a recruit to my company, I would take the scout any day. Indeed, I would prefer one scout to two cadets, because whereas the scout could be taught platoon and company drill in no time, the cadet could not be taught all that scouting means under several months.

Thousands of former scouts and scout officials served under Gen. Pershing and rendered fine account of themselves, living up to scout ideals of courage, loyalty, and good faith, doing their duty to God and country as pledged by their well-kept oath. They were not especially trained to be soldiers before they entered the Army, but they were especially trained to be men, which is an even better thing.



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VOCATIONAL EDUCATION

By WILLIAM T. BAWDEN
SPECIALIST IN INDUSTRIAL EDUCATION, BUREAU OF
EDUCATION

[Advance sheets from the Biennial Survey of Education in
the United States, 1916-1918]



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VOCATIONAL EDUCATION.

By WILLIAM T. BAWDEN,

Specialist in Industrial Education, Bureau of Education.

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IMPORTANT FACTORS OF PROGRESS.

The two years under review constitute a period of unprecedented progress in vocational education, since it is probably conservative to say that the tangible results accomplished equal those of any decade preceding. The important factors in this development may here be noted, briefly, as follows:

(1) Most important of all has been the culmination of a 10 years' campaign for securing Federal aid for vocational education, resulting in the enactment of the Smith-Hughes law and the creation of the Federal Board for Vocational Education.

(2) Second in importance only to the activities under the Smith-Hughes Act has been the gigantic experiment in industrial education conducted by the Committee on Education and Special Training of the War Department. The practical working out of this plan for training the "fighting mechanic" will undoubtedly be regarded as one of the achievements of the war.

(3) The Emergency Fleet Corporation of the United States Shipping Board developed a unique and comprehensive plan for greatly increasing the available supply of skilled mechanics for the shipyards. The need assumed such large proportions and the emergency was so threatening that those in charge of the work were forced to devise a special system of teacher training, which involved original and suggestive methods and plan of organization.

(4) Important contributions were also made by a number of other governmental and other agencies, including: The Navy Department; the Department of Labor, through its Training and Dilution of Labor Service; the Council of National Defense, through the War Industries Board and other channels; the National War Work

Council of the International Young Men's Christian Association, and related organizations; the Bureau of Education through a series of conferences, by bringing about the formulation of a constructive program of industrial arts instruction, and in other ways.

(5) During the past two years there has been an unprecedented reliance upon the machinery of popular education for the accomplishment of undertakings of the gravest importance, not to this Nation only, but to the world. This has been true not only in official circles, but nearly every individual and every organization that has had a program for helping to win the war has conceived of the public-school system as an indispensable and prominent feature of the measures proposed for bringing about the desired results. It is significant that a conception of the intimate relation between education, our recent achievements as a Nation, and the future security of the Republic has caught the popular imagination, and is reflected in the public statements of responsible officials and other leaders of thought. It is of the greatest significance also that the great bulk of this concerted educational effort, certainly one of the phenomena of history, has found its inspiration and its expression in terms of the vocational phases of education.

(6) There has been an observable increase in both the amount and the proportion of attention given to the problems of vocational education in public discussion. In this increased tendency to think and talk and write in terms of vocational education, it is believed that evidence can be found of a disposition to consider "practical" education and so-called "cultural" education as complementary, rather than alternative, as some alarmists would have it.

(7) This widespread popular interest in educational matters has been accompanied by a new and more critical appraisal of school programs and courses of study and an inquiry as to just what service is being rendered to children. New emphasis has been given to the meaning and aims of education; education is being thought of more and more as something having a definite purpose, other than simply preparation for more education; there is increasing demand that this purpose shall have more definite relation to life and the means and manner of living. The increased emphasis on definition of aims and purposes of types of school, curricula, and special subjects of study, has undoubtedly been stimulated by the operation of the Smith-Hughes Act. The very fact that schools of certain types have been set up, with definite aims declared, has raised these inquiries as to aims and purposes with respect to other schools which have been accepted hitherto without question.

(8) Another significant evidence of progress is to be noted in the gradual diffusion of the idea that secondary education should be thought of as something to be adapted to the needs of young per-

sons of ages 12 to 18 years approximately, rather than something whose content and methods should be determined by the fact that its students are expected at entrance to have completed the prescribed routine of a certain number of grades, and are expected at graduation to meet the arbitrary entrance requirements of higher institutions. Out of this conception comes the growing interest in the junior high school, the continuation school, the cooperative school, and, in part at least, vocational guidance.

(9) More general recognition of the fact that the work of teaching demands special fitness and preparation is one of the encouraging signs to be noted. There is a technic in teaching, as there is in a skilled trade. As an indication of the extent to which this view is spreading, it is worthy of note that during the summer of 1918 there were special classes for the preparation of teachers of vocational subjects conducted under the direction of State boards or departments of education in 26 States, with length of session ranging from 2 to 10 weeks. At the same time it is becoming more and more apparent that the average mechanic, with his lack of education and limited opportunity for acquiring a broad outlook on life, can not with certainty be made into a skillful and inspiring teacher through the medium of these short courses alone.

(10) Our experience in the great war has served to emphasize one serious national weakness, to which, however, attention had frequently been called before. The old-time, all-round apprenticeship system has been allowed to disappear in certain important trades, without any adequate provision for something to take its place, either in industry or in education. No effective steps were taken to insure a continual supply of all-round mechanics, even in those trades in which the need was recognized.

(11) One of the serious shortcomings in the program for vocational education in this country is that, as yet, no adequate measures have been taken looking toward the proper coordination of compulsory-education legislation, vocational-education legislation, and child-labor legislation. There can be no justification for neglecting the fact that in most States a hiatus exists between the close of the period of compulsory schooling and the beginning of the period when young persons are permitted by law to work for wages. The dangers both to society and to the youth are obvious.

(12) There has been a noticeable tendency in public school manual training shopwork toward the industrial point of view, in subject matter as well as method. "Projects, shop experience, community service, jobs, not 'models' are the common objects of discussion" on the programs and in the conferences of manual training directors and instructors.

(13) There has been a notable increase during the past two years in both the volume and the quality of textbooks and reference material in practically the entire field of vocational education. A number of special activities during the war period had the effect of stimulating immensely the production of this material.

(14) Some indication of the development of industrial education in the United States during the past few years may be observed by comparing the "Directory of Vocational Education" issued by the Bureau of Education in 1914 with that issued in 1918. The former was a leaflet consisting of 6 pages of names and addresses; the latter contains 29 pages and a supplement. Obviously this comparison does not give a direct measure of the progress in vocational education, since the published lists of both dates are known to be incomplete. Nevertheless, certain facts are quite suggestive.

In 1914 a systematic attempt was made to compile a complete list of "Schools in which trades are taught." This designation was used in preference to "trade schools," for the reason that a considerable number of schools which are not properly classed as trade schools maintain departments or classes in which real trade instruction is given. The list as published is accompanied by the following note:

In the above list are included schools offering one or more courses which prepare students for the mechanical trades and industries, by teaching the technic of the occupation in whole or in part, with the expectation that the training given in such course shall serve to shorten the usual period of learning or apprenticeship in the occupation.

The number of schools listed on the basis of the returns from a widely distributed questionnaire was 86, located in 19 States.

A similar inquiry made in 1918 resulted in the listing of 285 schools, located in 40 States. Recognizing the difficulty of defining a trade school or a trade class in such terms as will yield figures giving an accurate account of the progress taking place in this important field, the 1918 inquiry was accompanied by the following note:

It is intended to include in this list those schools, public and private, which offer one or more day courses which prepare students, male or female, for the mechanical trades and industries, by teaching the technic of the occupation in whole or in part, with the expectation that the training given in such course shall serve to shorten the usual period of learning or apprenticeship in the occupation.

This expectation should be justified by the provision of conditions which look definitely toward this end, and should include at least the following: (a) The students should spend not less than 10 hours (60 minutes each) per week in the practical shopwork or other technical processes of the occupation; and (b) the instructor should have had practical experience as a wage-earner in the occupation for which he is giving instruction.

In 1918 also, for the first time, an attempt was made to compile a complete list of "Trade continuation schools." Of these, 144 are

listed, located in 29 States. The inquiry was accompanied by the following note:

It is intended to include in this list those schools, public and private, which offer one or more courses, day or evening, for the benefit of students, male or female, who seek, by means of these courses, to prepare themselves for useful employment or for promotion in their present employment, including schools offering cooperative or part-time classes, in which employed persons attend school a certain number of hours per week during working hours, or alternate between school and employment.

The 1918 directory also includes a list of State officials having charge of the administration of vocational education in the several States. The number of persons listed in this section is 157, representing all of the 48 States, as well as the outlying possessions of the United States. With the exception of perhaps a score of positions in six or eight States, this entire official personnel has come into existence during the past four years. The same statement is true also of the official staff of the Federal Board for Vocational Education, now numbering upwards of 500 individuals.

THE FEDERAL BOARD FOR VOCATIONAL EDUCATION.

The Smith-Hughes Act was signed by President Wilson on the afternoon of Friday, February 23, 1917, while the National Society for the Promotion of Industrial Education, to whose efforts this legislation is largely due, was holding its tenth annual convention in Indianapolis. The appointive members of the board were nominated by the President on June 29 of the same year, and confirmed by the Senate on July 17. The first meeting of the board was held on Saturday, July 21, in the office of the Secretary of Agriculture in Washington.

Under the Smith-Hughes Act Federal appropriations ultimately aggregating over \$7,000,000 per annum have been made available for cooperation with the States in the promotion of vocational education in agriculture, in trades and industries, and home economics, including the preparation of teachers. The principle of Federal aid through the States to education in institutions of subcollegiate grade has been established.

Its early enactment was strongly urged by President Wilson in addressing Congress in December, 1916, as—

of vital importance to the whole country because it concerns a matter too long neglected, upon which the thorough industrial preparation of the country for the critical years of economic development immediately ahead of us in very large measure depends. * * * It contains plans which affect all interests and all parts of the country, and I am sure that there is no legislation now pending before the Congress whose passage the country awaits with more thoughtful approval or greater impatience to see a great and admirable thing set in the way of being done.

NEW EDUCATIONAL POLICIES.

As an expression of educational policy, the new act embodies some important departures from previous legislation. It makes provision for the training within the schools of a large group of our population unreached directly by the Federal Government. On the other hand, by offering instruction along vocational lines and of subcollegiate grade, it supplements the Morrill Act, the expressed purpose of which is to maintain colleges "to teach such branches of learning as are related to agriculture and the mechanic arts * * * in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." On the other hand, since it contemplates a system of training in the schools, it also supplements the Agricultural Extension Act of 1914, in which the service provided is "the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in State colleges in the several communities." Since it imposes definite requirements as to the training of teachers, it also represents a material extension of authority over the purely permissive provisions of the Nelson amendment of 1907.

The Smith-Hughes Act creates a Federal Board for Vocational Education. This board consists of seven members, including the Secretaries of Agriculture, Commerce, and Labor, and the United States Commissioner of Education, *ex officio*, with three members appointed by the President and confirmed by the Senate, ultimately for a term of three years each. One of the appointed members is a representative of the manufacturing and commercial interests, one of the agricultural interests, and the third of those of labor. The board selects its own chairman each year.

The Federal board is charged with the administration of the act, the details as to the care of funds, the certifying of the States, etc., in general plan resembling the legislation for the agricultural colleges and experiment stations. In addition it is empowered to make, or have made, investigations and reports to aid the States in the establishment of vocational schools and classes and in giving instruction in agriculture, and the trades and industries, commerce and commercial pursuits, and home economics. These studies include agriculture and agricultural processes and the requirements upon agricultural workers, similar studies as regards the trades, industries, and commerce, home management, domestic science, and the study of related problems, and the principles and problems of administration of vocation schools and of courses of study and instruction in vocational subjects. In the discretion of the board, the studies concerning agriculture may be made in cooperation with or through the Department of Agriculture. Similar cooperative arrangements may

be made with the Departments of Labor and Commerce for industrial subjects, while the studies of the administration of vocational schools, curricula, and methods of instruction in vocational subjects may be taken up in cooperation with or through the Bureau of Education. An appropriation of \$200,000 per annum, available from the date of passage of the act, is made to the board for its expenses.

STATE BOARDS FOR VOCATIONAL EDUCATION.

To cooperate with the Federal board in carrying out the act, each State when accepting its provisions is to designate a State board of at least three members. The State board of education or some board having charge of the administration of public education or of any kind of vocational education may be designated as the State board, or an entirely new board may be created. Of the 48 States, 35 have designated the State board of education or the State department of public instruction; 11 have designated a State board for vocational education or industrial education; 1 a State board of agriculture; and 1 a State high school board.

The State board is to prepare plans for the approval of the Federal board, showing the details of the work for which it is expected to use the appropriations. These plans it is specified must show the kinds of vocational education contemplated, the kinds of schools and equipment, courses of study, methods of instruction, and the qualifications and the plans for the training of the teachers and agricultural supervisors. In all cases the work must be conducted under public supervision and control.

The plans of expenditures for salaries in agricultural and industrial subjects must show that the controlling purpose of the education is to fit for useful employment, that the training is of less than college grade, and that it is designed to meet the needs of persons over 14 years of age who have entered upon or who are preparing to enter upon agricultural or industrial work.

The Federal appropriations to the States are divided into three distinct groups, providing, respectively, for the payment of salaries of teachers, supervisors, or directors of agricultural subjects; for the payment of salaries of teachers of trade, home economics, and industrial subjects; for the preparing of teachers, supervisors, or directors of agricultural subjects, and of teachers of trade and industrial and home economics subjects.

The main initial appropriation for salaries in agricultural subjects is \$500,000. This is increased by \$250,000 per annum during the next six years and then by \$500,000 per annum during the next two years, making an appropriation of \$3,000,000 for the fiscal year 1926 and annually thereafter. Like appropriations are made for salaries in industrial subjects.

The main appropriation for preparing teachers and supervisors is likewise \$500,000 for the first year, but increases to \$700,000 and \$900,000, respectively, for the next two years, and then becomes \$1,000,000 per annum thereafter. The Federal appropriations for teacher training must be divided among agricultural, trade and industrial, and home economics subjects, no one of these subjects being granted more than 60 nor less than 20 per cent of the State's allotment for any year.

The training of the teachers provided for will throw a very heavy burden of responsibility on our higher technical institutions and particularly the land-grant colleges. These institutions have been very successful in training technical experts who have contributed in large measure to the success of our industries. They have not as yet paid any large attention to the training of teachers for secondary schools of the strictly vocational type. The pedagogy of this class of education is yet in its preliminary stages. It evidently will not do simply to copy what has been worked out abroad. There is therefore great incentive for men of original thought and inventive skill to enter this comparatively new field of teacher training.

ACTION BY THE STATES.

Up to January 1, 1918, 48 States accepted the Smith-Hughes Act either by specific provisions of the legislatures or by acts of the governors and by that date the plans of the 48 States had been examined by the Federal Board for Vocational Education, approved, and the board had certified to the Secretary of the Treasury that these States were entitled to receive the allotments for the year 1917-18, apportioned by the terms of the act.

Federally aided vocational courses have been set up in agriculture in 41 States, in trade and industrial subjects in 32 States, and in home economics in 29 States; 22 States have organized courses in each of these three fields; in 46 States teacher-training courses have been organized.

The record of the States in this work is impressive, especially when it is borne in mind that the record covers an initial period of only 10 months. In Massachusetts, for example, vocational agriculture is taught in 19 secondary schools with Federal aid; trade and industrial subjects, in 36 schools; and home economics, in 29 schools. In New York the number of Federal-aided secondary schools is 4, of agriculture, 60, and for trades and industries, 40; in Pennsylvania, for agriculture, 38; for trades and industries, 131; and for home economics, 69; in California, for agriculture, 12, for trades and industries, 14, and for home economics, 14; in Indiana, for agriculture, 37, and for trades and industries, 21; in Mississippi, for agriculture,

34, for trades and industries, 1, and for home economics, 3. These States are illustrations of the widespread development of secondary vocational education.

The chief handicap in the promotion or introduction of vocational instruction was the lack of qualified teachers. This was due largely to the war emergency, many of the teachers being drafted or volunteering for service in the Army.

THE SMITH-SEARS ACT.

In June, 1918, Congress passed the Smith-Sears Act, providing for the vocational rehabilitation and return to civil life of disabled persons discharged from the military or naval forces of the United States. The act delegates to the Federal Board for Vocational Education the responsibility of reeducating the disabled men in some useful employment, after their discharge from the Army or Navy, and provides for a plan of cooperation between the board and the Surgeon General's Office, covering the work done in hospitals, in order that the men may have the advantage of a continuous and coordinated plan.

It is provided that there shall be full and complete cooperation of the several Government offices concerned with the future welfare of men discharged from the Army and Navy, including the medical and surgical services of the War Department and the Navy Department, the Bureau of War Risk Insurance in the Treasury, and the labor exchanges in the Department of Labor, and the Federal board. Each will render service in retraining and returning to civil employment men disabled in the war.

The Federal board will act in an advisory capacity in providing vocational training for men during their convalescence in the military hospitals, before their discharge from the Army and Navy, and will continue such training to finality after discharge, as the civilian agency for rehabilitation and placement in industry.

THE STUDENTS' ARMY TRAINING CORPS.

The Students' Army Training Corps represents a unique educational undertaking on the part of the Government. The work was under the direction of the Committee on Education and Special Training of the War Department. A circular of information issued by the committee stated the purpose in view as follows:

The primary purpose of the Students' Army Training Corps is to utilize the executive and teaching personnel and the physical equipment of the educational institutions to assist in the training of our new armies. Its aim is to train officer-candidates and technical experts of all kinds to meet the needs of the service. This training is conducted in about 550 colleges, universities, professional, technical, and trade schools of the country.

The corps was divided into two sections—the collegiate or “A” section and the vocational or “B” section. Of these the former is discussed elsewhere in this report under higher education.

Concerning the latter, it is to be noted that the experience of three years of war in Europe demonstrated the need of large numbers of skilled mechanics and technicians of many kinds. When the United States entered the war, therefore, and undertook the organization of an army, it soon became apparent that a plan must be devised to train mechanics quickly and in large numbers. To accomplish this result the War Department did not depend on the establishment of new schools, but utilized existing institutions which had the necessary facilities. The men, in uniform, were assigned to institutions in units of 200 to 2,000, where they were housed and fed under military discipline for periods of two months each. Military drill and industrial instruction, including shop practice, were provided in an intensive form as the regular daily routine. The initial assignments of men began work on April 1, 1918. Some idea of the magnitude of the undertaking is conveyed by the announcement that on August 1, 1918, there were 52,025 soldiers under instruction, in 35 different trades or occupations, in 144 institutions, located in 46 States and the District of Columbia. It was estimated that by the close of the fiscal year, June 30, 1919, if the plans had been carried out, more than 300,000 men would have received instruction in these courses, sufficient to make them definitely serviceable in some mechanical or technical duty in addition to their training as soldiers.

EFFECT ON EDUCATIONAL SYSTEM.

Without question the work of the Section B units of the Students' Army Training Corps will prove to have been the most significant experiment in vocational education thus far undertaken under a democratic form of government. It is too soon to appraise the results in full, but as soon as adequate reports are available, educators, and especially students of industrial education, are urged to examine them with the greatest care. It is believed that our public-school system may with profit learn a number of valuable lessons from the experience of these Army training units.

In this connection it is possible to refer briefly to two points only, but these will serve to suggest others that will develop later: (1) The experience of the Army training units seems to demonstrate the futility of short shop periods; that is, shop periods too short for the student to see work processes in complete wholes. The amount of ground that can be covered in a short course, eight weeks in length, consisting of daily periods of six or seven hours in shop, drafting room, or laboratory, proved to be greatly in excess of all expectations.

Numbers of competent observers have predicted that the results of this experience will revolutionize educational practice, not only in trade instruction classes, but in colleges and universities as well.

(2) Experience seems to indicate also that small classes, with a reasonable amount of individual instruction, are essential to accomplish the best results. Individuals vary greatly in capacity and performance, and can not be instructed efficiently in mass.

VOCATIONAL TRAINING IN ARMY HOSPITALS.

The subdivision of education in the division of physical reconstruction under the Surgeon General, United States Army, was begun in October, 1917, for the purpose of devising plans for providing educational facilities for disabled soldiers and sailors during the period of hospital treatment and convalescence. On May 20, 1918, Dr. James E. Russell, dean of Teachers' College, Columbia University, New York City, was appointed chief of the subdivision.

The work undertaken has been practical, so far as possible, and has included work needed for the hospitals. Activities include, besides repair work of various kinds, basketry, typewriting, telegraphy, academic studies, agriculture and gardening, bookkeeping, free-hand and mechanical drawing, auto repair, carpentry, cobbling, and other handicrafts. In all, more than 100 different activities have been introduced into the hospitals. Sixteen general convalescent and reconstruction hospitals have been provided for, or one in each of the 16 military districts.

The records of 516 cases which have been treated in four hospitals show 134 men able to return to full military duty, 210 fit for return to limited service, and 172 who are eligible for discharge.

In the last group, 12 are classed as helpless or institutional cases; 121 are able to return to their former occupations; and 39 will need further training to fit them for earning a livelihood.

These figures show the division of responsibility in the work of reconstruction. The task of fitting men for further military service is at present the most urgent need, because wherever an able-bodied man behind the lines can be replaced by one less fit physically but vocationally capable, a soldier is gained for active duty.

SPECIAL TRAINING IN THE SHIPBUILDING INDUSTRY.

In October, 1917, a comprehensive project of the greatest interest and importance, looking toward the training of instructors and skilled mechanics for the shipbuilding industry, was undertaken by the Emergency Fleet Corporation of the United States Shipping Board. For this purpose, an industrial training section was organized, and at its head was Egbert C. MacNary, who obtained leave of absence from his position as director of industrial education in Springfield, Mass.

The object in view was to organize a training department in each shipyard, at the head of which was placed a director in full charge of all matters pertaining to the training or breaking in of workers and general supervision of the training department. It was understood that it would be necessary to allow the director and his staff of instructors to be free from the usual duties of production foremen, in order to devote their entire time and energies to training men.

It early became apparent that the necessary expansion in the shipbuilding program depended absolutely on the creation of increased forces of skilled and semiskilled men. The country was scoured for men having knowledge of any branch of shipbuilding, and yet the supply of mechanics proved utterly inadequate to meet the demands of the Shipping Board. It was decided, therefore, that the necessary increases of working forces must be made through training men, and that the task must be undertaken immediately and on an unprecedented scale.

EXTENT OF DEMAND.

The extent of the demand for skilled workers in the shipbuilding industry was not at first generally appreciated by the public. Until recently the largest shipyard in the United States was one containing five ways. When running at full capacity each way provides employment for approximately 1,000 men, including the contributing shops and drafting rooms. At the time this training plan was undertaken, there was under construction at Hog Island, near Philadelphia, one shipyard consisting of 50 ways. The Emergency Fleet Corporation announced in October, 1918, that fully 60,000 additional men would be required within a few months in the Philadelphia district alone.

The solution of the problem evidently was to take skilled and semi-skilled men from kindred trades, in large numbers, and give them short intensive courses of instruction in selected fragments of the shipbuilding trades. Since the typical foreman possesses no special skill in giving instruction to the men who work under him, the first step was to organize for the entire chain of shipyards a source of supply of trained directors and instructors.

For this purpose an instructors' training center was established in the plant of the Newport News Shipbuilding & Drydock Co., Newport News, Va. Associated with Mr. McNary and in charge of this training center was Charles R. Allen, of Massachusetts.

To this center the cooperating shipyards sent relays of selected men for courses of instruction six weeks in length. In most cases the yards sending the men paid their wages and expenses while in attendance. For one-half of each day the men were instructed in the methods and devices of teaching. During the other half they were employed in

actually instructing groups of workers in the yard, under the supervision of the training staff. When the men completed this preparation they returned to their yards to set up training classes for breaking in new men and for advancing employees from their present jobs to those requiring greater skill.

Students of industrial education will await with great interest detailed reports of the means and methods employed in this project and the results achieved.

VOCATIONAL EDUCATION IN THE NAVY.

The section on education in a recent report of the Secretary of the Navy presents a phase of activity not generally appreciated by the civilian. The following passages are quoted:

Every man in the Navy is a student, from the Admiral in the War College to the midshipman at the Naval Academy and the apprentice in the training station and afloat. The beneficial result of the whole educational system in the Navy is that theoretical knowledge is almost immediately put into practice. * * * The man who does not wish to go to school ought not to knock at any door in the naval service. The Navy is the greatest educational institution in America, and in it theory is valued only as it is put into practice. * * *

The Navy offers a wide variety of industrial courses to ambitious young men. * * * In the electrical schools at the Brooklyn and Mare Island Navy Yards the course of instruction comprises machine-shop work, reciprocating steam engines, steam turbine engines, internal-combustion engines, magnetism and electricity, dynamos, motor generators, alternating currents, and the like. In the radio group there is thorough practice in the radio mechanism for receiving and sending. In the Artificer School at the Norfolk Navy Yard men are taught to be shipwrights, shipfitters, blacksmiths, painters, and plumbers. Both at Newport, R. I., and San Francisco are yeomanry schools, where the men are perfected for the clerical work of the Navy, to become expert stenographers, typewriters, bookkeepers, etc.¹

In addition, there is the Hospital Corps, with schools at Newport and San Francisco. Schools for musicians are located at Norfolk and San Francisco. There are schools for machinists and coppersmiths at Charleston, and commissary schools at Newport and San Francisco. The school of aeronautics is located at Pensacola, and the gunners' school at Newport. Referring to the outlook for the blue-jacket, the report well says, "He has the fourfold opportunity of serving his country, learning a trade, improving his mind in study, and travel."

CONFERENCES ON SPECIAL PHASES OF INDUSTRIAL EDUCATION.

During the period under review the Bureau of Education has conducted a series of important conferences of specialists in indus-

¹Annual Report of the Secretary of the Navy for the year ending Dec. 1, 1916.

trial education, superintendents of city schools, and others. These conferences were organized for the purpose of discussing certain special problems of industrial education and related topics, and of making the conclusions arrived at available to students of the subject by means of published reports.

(1) RAISING THE STANDARDS OF MANUAL ARTS INSTRUCTION IN THE PUBLIC SCHOOLS.

The vital relation between the right kind of manual training in the public schools and subsequent industrial education has been emphasized constantly by the Bureau of Education since the beginning of its interest in these fields. For the purpose of studying certain phases of this relationship, a conference of specialists engaged in the training of teachers was held at Peabody College for Teachers, Nashville, Tenn., December 7-9, 1916. Twenty-two institutions, from 11 States, were represented.

The topics discussed included: (1) Analysis of the contacts with possible future vocations that should be represented in the manual arts work, as a basis for determining the task of the institution that is to prepare the teachers. (2) How wide a range of shop subjects may a superintendent reasonably expect one teacher to handle efficiently in combination? (3) To what extent should preparation for vocation be a motive in the work of the elementary school? (4) Definite standards for manual arts work, and means for testing the results of teaching. (5) Problems of practice teaching in preparing teachers of manual training. (6) Qualifications of teachers of manual arts subjects. The following conclusions may be noted:

(1) The development of the manual arts has made a real contribution to other phases of education, in that the units of construction, serving as *units of instruction*, are setting good examples of organization for other subjects.

(2) The whole development of the manual arts seems to be pointing toward a solution of the problem of vocational education. Inevitably the majority of boys and girls are going into other than professional occupations, and we must recognize the importance of the "prevocational" value of manual arts work in the elementary school, furnishing, as such work does, a basis for the education of the whole people much broader and more complete than has been hitherto available. To discover how to assist young persons in the adjustment to possible future vocations is one of the most important educational problems before us.

(3) It is important to distinguish clearly: (a) Manual arts subjects offered primarily for general educational purposes; (b) subjects of-

ferred primarily for the purpose of affording experience in practical activities fundamental to a variety of occupations, to be utilized as a basis for choice of vocation or of subsequent vocational courses; and (c) technical subjects offered primarily for the purpose of affording definite preparation for specific vocations.

(4) By opening the high-school shops during vacant periods to special classes of pupils of less than high-school preparation, the high schools should become the centers for whatever training is needed in many cities for some time to come.

(5) No manual arts teacher can reasonably be expected to teach more than two academic subjects in connection with the usual shop subjects demanded of him.

(6) The course of study in manual training is not to be thought of as simply a series of "stunts." The student should be confronted with a series of "problems" to be solved; and the solution of a problem should involve not only (a) study of materials, and (b) manipulation of tools and processes, and (c) the construction of some finished article, but also, and very important, (d) the planning and working out of the solution.

(7) There is need of more definite standards for measuring or testing the results of teaching, and for determining the progress of pupils in manual arts subjects.

(8) The work in manual arts affords a better opportunity for the preparation of lesson plans (in practice teaching) and careful analysis of processes and procedure than is to be found in any other subject in our training schools. Furthermore, through the emphasis on design an intellectual content has been put into manual arts work to the extent of making it stand out among all the intellectual studies.

(9) The tendency to employ teachers in manual arts and vocational subjects who are not properly qualified for the work to be undertaken is unfortunate, alike for the school, the teacher, the pupil, and the subject. Present methods of examining and certifying teachers, in some localities, are manifestly not adapted to insure the appointment of competent teachers of special subjects.

(10) It is worth while to call attention to the magnitude of the problem involved in producing a person who is a graduate of college, a broadly educated and cultured citizen, and at the same time a professionally trained educator, as well as a specialist in certain technical lines or in certain special vocations. In this we are attempting a tremendously difficult thing. There are involved here certain types of knowledge and skill that have never been required of the school-teacher heretofore; and, furthermore, these are to be measured by standards usually set up only in the various occupations concerned.

(2) POLICIES IN VOCATIONAL EDUCATION.

A conference of specialists was held in Indianapolis, Ind., February 23, 1917, to consider plans and policies in vocational education, and especially the types of investigation which should be undertaken.

(3) PREVOCATIONAL EDUCATION IN THE SMALL CITY.

A conference of superintendents of public schools in cities having a population of 10,000 to 25,000 was held in Kansas City, Mo., February 28, 1917, to consider the problems of prevocational education in the small city. Twenty-four States, the District of Columbia, and Canada were represented by superintendents, principals, and teachers.

The general topic was "assisting pupils in the upper grammar grades to plan ahead." There were 371 cities in this population group according to the 1910 census, and the problem becomes complex when the great variety of conditions is considered. The small city can not expect to offer the same variety of work given in the larger centers, but if the State be taken as the unit, types of experience may be selected from the various industries of major importance, which are especially emphasized in the community.

The conference resulted in the following conclusions: (1) A larger amount of time is necessary for prevocational work than is now usually allotted to manual training or home economics in the grades. It is, further, not only a question of time, but of what is done in the time, hence (2) conditions must resemble those of industry with respect to materials, methods, and speed. A more formal procedure in the school is necessary, however, because of teaching large numbers. (3) The teacher has the responsibility of selecting the "type" experiences, and his success in this depends upon his knowledge and insight. Upon the superintendent rests the responsibility of selecting teachers who can do the job. (4) The equipment now used for manual training and home economics may be used for prevocational work, but there must be a wider range of work than is possible in woodworking and cooking and sewing in a 90-minute period weekly if the work is to be truly worth while as a basis for intelligent choice of future vocation.

(4) FEDERAL AID UNDER THE SMITH-HUGHES ACT AND THE PREPARATION OF TEACHERS.

A conference of specialists was held at the University of Missouri, December 13-15, 1917, to consider the general question of Federal aid under the Smith-Hughes Act, and the preparation of special teachers. Eighteen institutions engaged in the training of teachers in 12 States, as well as three State departments of public instruction, were represented. The topics discussed included: Federal aid

under the Smith-Hughes Act for the preparation of teachers of trade and industrial subjects; curricula for the preparation of teachers of the manual arts; present conditions in respect to practice teaching; a proposed program for practice teaching; problems connected with the examination and certification of special teachers; content of technical courses of study in the intermediate or junior high school. The following conclusions may be noted:

(1) The selection of properly qualified candidates for the teacher-training course is an important matter. Many difficulties will be obviated, and the line of action in specific cases will frequently seem more clear, if it be recognized that no individual may claim an inherent right to teach. The burden of proof, so to speak, should rest on the individual. He should be required to demonstrate his fitness for special service, rather than simply permitted to pursue an expressed desire to secure a position.

(2) New machinery and a new basis for the examination and certification of teachers are urgently needed. These should include means for testing and evaluating: (a) Vocational experience; (b) education and professional training; (c) personality; (d) ability to teach.

(3) For some time to come the scheme should include some effective provision for the training of teachers in service.

(4) Adequate time must be allowed in any curriculum in order to prepare teachers who will be competent to *teach* and *do* the given line of work.

(5) The institution should define more clearly (in terms of prospective teaching position) the aim or goal which it is proposed to assist the student to attain as the result of following any given curriculum.

(6). Observation and practice teaching are essential factors in the preparation of every teacher, and adequate provision should be made for them in normal-school curricula.

(7) It is more important to have a supply of the teachers needed in these new types of school than it is to enforce and perpetuate traditions in the matter of teachers' examinations and certificates.

(8) The discussion of the last topic on the program served to emphasize the following advantages and disadvantages of a school program involving a large number of "acquaintance courses," designed to afford the individual pupil opportunities for shopwork in each of several vocations:

Advantages.—(a) Wide vocational acquaintance; (b) remarkable basis for the cultivation of appreciation; (c) gets the interest of pupils in real work.

Disadvantages.—(a) Danger of lowering standards of workmanship (compared with a program attempting fewer lines of shop-

work); (b) technical processes in all lines necessarily confined to the beginning stages; (c) impossible to pursue any one line to mastery; (d) difficult to obtain teachers qualified to conduct the variety of shopwork proposed, especially in a small school or system.

(5) EXAMINATION AND CERTIFICATION OF INDUSTRIAL TEACHERS.

In order to consider the problems of examining and certifying industrial teachers, a conference of specialists was held in Philadelphia, February 22, 1918. Nineteen States and the District of Columbia were represented. The general topic was "Preliminary suggestions as to desirable basis and machinery for the examination and certification of special teachers." The following conclusions may be noted:

(1) Measures which depend on industry to supply teachers ready-made, or approximately so, must be regarded as merely temporary, and the machinery necessary for detecting such prospective teachers should not be permitted to determine the ultimate forms which such measures should take.

(2) A teacher capable of doing the job effectively represents an individual of a high type, who is already making a distinct success of the vocation in which he is engaged. To divert such persons into the work of teaching will require the payment of adequate salaries.

(3) Tests to be applied must be free from the defects of existing plans for examining and certifying teachers.

(4) Existing methods of examination should be modified so as to include adequate tests of personal characteristics.

(5) Suitable use should be made of practical tests and demonstrations of skill and ability of various kinds.

(6) It is essential that provision be made for examiners who are themselves competent in the field covered by the examination in each case, and whose ratings will thus command confidence and respect in that field.

(7) Every plan for examining and certifying teachers should be supplemented by a systematic and efficient plan of probationary teaching and training in service.

THE CONTINUATION SCHOOL.

One of the noteworthy factors in recent progress in vocational education is the continuation school. During the past decade a number of the States have enacted legislation encouraging the organization of schools of this type. Massachusetts, Wisconsin, and Pennsylvania, especially, have developed strong systems of continuation schools on a state-wide basis.

During the past two years a new stimulus has come from the Federal subsidies made available under the Smith-Hughes Act. As already noted, in 1918 there were 144 trade-continuation schools reporting to the Bureau of Education, located in 29 States and the District of Columbia.

The program of the National Education Association commission on the emergency in education contains a strong plea for a more general development of the continuation school, on a broader and more serviceable basis than has hitherto been characteristic of this institution in this country. The following paragraph is quoted from the recommendations of the commission:

The continuation school is not an experiment in this country. In many of our industrial communities it exists and has proved its usefulness. But it needs extension upon a much larger scale than has as yet been contemplated if it is to counteract the danger that threatens. It needs a broadening of its scope, as well. With us the continuation school has developed as a phase of the movement for vocational education. As it exists in this country to-day, it is essentially a vocational school, limited in its instruction to those subjects that are directly related to employment of the student. This is a narrow conception—far narrower than the conception of the continuation school that has been taking root in England and France. Without sacrificing in any essential way its service to industry, the scope of the continuation school should be broadened to include those elements of general and liberal education that are so fundamental to sound democratic citizenship. It should supply to the boys and girls who must leave school and go to work something of the insight, something of the broader outlook, something of the stimulus to mental growth that the full-time high schools and colleges provide. It should be not a thing apart, a cheap makeshift for the unfortunate, but rather a recognized and well-supported unit in democracy's public school system—a temporary unit, let us hope, serving a useful purpose until the day when democracy decrees that every boy and girl to the age of at least 18 years shall have the privilege of attendance upon a full-time school the work of which is adapted both to his capacities as a learner and to his needs as a citizen.¹

THE COOPERATIVE SCHOOL.

Much attention has been given recently to a special type of continuation school which has come to be known as the "cooperative school." Developed first in connection with the administration of the college of engineering, the plan has been successfully adapted to secondary school conditions, and is in operation in a number of cities.

The essential features of the plan seem to be:

(1) A definite cooperative arrangement between the educational institution and one or more industrial plants, by which the theoretical instruction is given by the institution and the practical experience is

¹ A National Program for Education—A Statement issued by the Commission on the Emergency in Education and the Program for Readjustment; National Education Association, Washington, D. C., June, 1918, pp. 24, 25.

given by the industries, and both are coordinated in a systematic and progressive educational program.

(2) Willingness on the part of the industrial plant to make such adjustments in equipment, processes, and methods as are necessary for promotion of the educational aim.

(3) Willingness on the part of the educational institution to eliminate nonessentials and to base theoretical instruction on what actually happens, and sufficient skill in organization to secure "*realization of theory through its practical applications.*"

(4) Careful selection of employers, instructors, and student-workers, who are capable of being inspired with a vision of the responsibilities as well as the possibilities of the plan.

(5) Administration of the device of alternating periods in such a way as to secure continuous and progressive action on the process or job in the factory, as well as in the work of the student and the instructor in the school.

SPECIAL ADVANTAGES IN SECONDARY SCHOOLS.

In considering the advantages of the cooperative plan in the high school it is necessary to recognize that the first appeal is made to boys and girls not now in school—to those who, because of economic necessity or indifference, have left school to go to work or to loaf. The number of these has been variously estimated by different authorities, but it can hardly be doubted that it is in excess of 75 per cent of all minors over 14 years of age. If any considerable number of these can be brought back into the schools, it must be regarded as worth the effort.

In the next place, a strong appeal is made to many boys and girls who are in high school at the cost of much real sacrifice and self-denial. If some way can be found to meet a part of the cost they can and will remain in school.

Again, some lessons can be learned only through practical experience in the ways of the world. Some of these lessons include the proper relation between the material and the spiritual phases of life, the meaning and value of money, the meaning of work and wages, and the relation between them, the importance of life motives. The learning of these lessons is of as much consequence to one individual as to another, irrespective of economic, intellectual, or social status. The cooperative plan is a contribution to the solution of some of the problems involved, and hence its advantages should be placed within the reach of all youth.

With these considerations in mind, the special advantages of the cooperative plan in the high school may be summarized as follows:

(1) The safeguards thrown about the young people in their places of employment, through the supervision exercised by the school and

the cooperation of employers, show an almost unbelievable improvement over the conditions hitherto characterizing the employment of minors in many places.

(2) The cooperative plan makes it possible for some boys and girls to continue in school, because of wages earned on half-time. Prolonging the period of active connection with the school, and of contact with sympathetic teachers and advisers, confers an incalculable benefit on growing boys and girls, and should lead to a permanent impetus to better things.

(3) The plan will doubtless induce some to remain in school because the school work is thus made more interesting, and the student can see a more direct relation between schooling and the promotion of his own interests.

(4) The experiences involved promote a more earnest and thoughtful attitude toward work and the responsibilities of life.

(5) The plan discourages idleness and unwholesome use of time, since the longer school day and year are fully occupied with interesting activities.

(6) The opportunity to engage in gainful employment on half-time, under suitable auspices, has a definite prevocational value, assisting young persons to discover their tastes and probable aptitudes.

(7) The successful operation of a cooperative school or class affords a convincing demonstration that a reasonable amount of work, under proper conditions, can be made to contribute definitely to the development of youth, instead of being, as frequently heretofore, a demoralizing, disheartening, and stunting influence.

(8) The plan gives the student, at the very least, a foothold in some industry or occupation, so that he does not feel lost when the time comes to leave school and take up the responsibilities of self-support.

(9) It should be emphasized that this plan does not neglect the need for general education, but insures to each individual an amount of cultural and liberalizing education sufficient to serve as a foundation for further study if he later finds it possible to continue his education. He certainly gets more of the cultural side of education than he will if he leaves school entirely to go to work.

PREVOCATIONAL EDUCATION AND THE JUNIOR HIGH SCHOOL.

One phase of progress in vocational education has resulted from the enforced examination of proper methods and procedure in the preliminary or preparatory stages, which have come to be included under the generally accepted term of "prevocational education." This development is taking the form of a new interest in the special

educational problems presented by boys and girls during the last year or two of the period of compulsory schooling and the year or two immediately following.

During the past few years certain propositions seem to have been emerging above the surface of discussion: (1) The amount of schooling prescribed by law in most States is not sufficient to guarantee the general diffusion among the population of those qualities of high intelligence, sound health, good citizenship, and economic independence which are regarded as indispensable to our national life; (2) too many of our children for one reason or another, or for no reason, fail to go beyond the legal requirements in the matter of schooling, or even to attain them—for too many boys and girls the minimum has become the maximum; (3) modifications in school programs and methods have induced many children to remain in school beyond the age of compulsory attendance, who otherwise would have left, and doubtless will retain many others if made effective; (4) if we must accept the fact that many children will leave school at the earliest legal opportunity, we can at least give them something during the last year or two they are in school which will be more serviceable to them than the traditional formal curriculum of the elementary school.

In discussing this phase of current progress, Dr. Snedden says:

The efforts now being made in various States to reorganize curricula of training and instruction for children 12 to 14 or 15 years of age constitute undoubtedly the most significant and important of contemporary movements in education. * * *

The educational needs of pupils of 12 to 14 years of age are variable to such an extent that, if conditions of educational administration permitted, a number of courses of training and instruction, dissimilar as to many important elements and also even as to quality of results expected in common studies, should be provided.¹

One of the concrete expressions of this new interest, and an attempt to realize the aim herein referred to, is the intermediate school, or junior high school. On this point Prof. Noyes well says:

It is the glory of the junior high-school plan that it has arisen out of the study of the needs of the adolescent child, that it is a constructive effort to bridge the gap between the elementary school and the high school, by vitalizing the curriculum.²

THREE TYPES OF JUNIOR HIGH SCHOOL.

Prof. Noyes distinguishes three types of junior high school: (1) In this type the teaching is departmentalized, each teacher having

¹ David Snedden: *Manual Training Magazine*, Vol. XVIII, No. 4, December, 1916, p. 158.

² William Noyes: *The Junior High School and Industrial Education. Manual Training Magazine*, Vol. XIX, No. 5, January, 1918, pp. 153-157.

but one or two subjects. In some cases there have been notable changes made in curriculum, but in many such schools there has been no change in either the amount or the method of industrial work. (2) In this type specialization has been the determining factor. The boy and girl and their advisers decide, so far as possible, upon entering the seventh grade whether he or she is to go to college, to the farm, to the countinghouse, to the kitchen, to the factory, or to the studio. "That such courses are called optional should not divert attention from the fact that the effect of such an arrangement is early choice and specialization in vocational lines." (3) This type is founded on the principle that the boy and girl should have as great variety of experience as is practicable, and that definite vocational choices should be deferred as long as possible.

In its extreme form, the pupil would pass through a cycle, not only of industrial but also of commercial, agricultural, artistic, and academic activities. It assumes that at the age of early adolescence it is impossible to foresee what the predilections and abilities of any child, boy or girl, are going to be.

In America more than in any other country in the world free vocational choices are possible, and examples are constantly brought to our attention of men, and to a less degree of women, who try one vocation after another before settling into their life work. And if we grown-ups keep changing for so many years, by what right should we impose a choice on children under 15?¹

THREE IMPORTANT ELEMENTS.

In the conduct of the industrial work in the junior high school it is important to maintain what Mr. Bowman calls the "vocational guidance flavor." By way of further analysis he points out three important elements which should characterize the work:

(1) The boys should become familiar with tools, form habits of good workmanship, and come in contact with efficient shop organization in each line of work.

(2) They should learn how these constructions are made in industry, how the things they do in the shop are placed "outside," and gain some industrial intelligence and insight.

(3) They should gain information through studies, discussions, talks, visitations, and readings about wages, chances for advancement, working conditions, and the like, in the work outside related to that which they are doing in school. This work will lead to investigations of lines not represented in the school.²

The junior high-school organization provides, or may provide, most favorable conditions for the vocational guidance and prevocational phases of education. That the movement to introduce the junior high-school plan seems to be spreading, as noted elsewhere in the Report of the Commissioner of Education, is significant of further developments to be expected in these fields.

¹ William Noyes: *The Junior High School and Industrial Education*. *Manual Training Magazine*, Vol. XIX, No. 5, January, 1918, pp. 153-157.

² Clyde A. Bowman: *Industrial Education for the Smaller Community*. *Manual Training Magazine*, Vol. XVIII, No. 5, January, 1917, pp. 177-180.

As has been pointed out by a number of students of current tendencies in secondary education, however, it is possible in this as in other things to have the form without the substance. Some such systems have advertised the introduction of the junior high-school plan, whereas examination will show that nothing more has been done than to take the seventh and eighth grades from the elementary school, and the ninth grade from the high school, and put the three together in a building of their own.

It is of the utmost importance that there shall be a more definite and authoritative determination of the *purposes* of prevocational education, the junior high school, and other departmental or special schemes of organization, and then a careful checking up of the means employed and the results secured. Formal reorganization is of no avail if actual results desired are not secured.

MANUAL TRAINING IN SECONDARY SCHOOLS RECEIVES NEW IMPETUS.

It has been well said that there are two products of the war which we should not willingly relinquish from our national life: "One is the spirit of thrift which has been brought out by the Liberty Loan campaigns; the other is the enthusiasm for education which has been developed by our training camps."¹

THE NEW EDUCATION.

This enthusiasm for education will necessarily be colored by the experiences through which we have passed, and will reflect the new spirit of patriotism and service. Education must continue to provide for culture and self-development, but from now on it must do more. It has been shown that it is possible for education to develop efficiency of the most rigorous and exacting type, and at the same time to generate idealism and nobility of motive. Even the educational program of our training camps, which many thought of only in terms of inexorable military discipline and short cuts to well-defined objectives, made definite provision for the humanistic element—the "morale" of the troops.

It has been discovered that education can be vocational *and* cultural; henceforth we shall not be satisfied with education that is not both. The new point of view that seems to be making definite headway suggests again the essential unity of the thing we call education.

The immediate effect upon education of the war and its concomitant events unquestionably will be a new emphasis on certain special phases: (1) Education for health, (2) education for vocation, and

¹ Outlook, editorial; Dec. 18, 1910, p. 613.

(3) education for citizenship. The urgent need for attention to these matters has been brought home to the consciousness of the people as never before. It is interesting to note that, contrary to the prophecies of some of our educational leaders, the Nation has been afforded a most convincing demonstration that these objectives are positively attainable without the sacrifice of those finer qualities of human life and relationships—the humanistic element—and, what is even more to the point, the machinery and methods for reaching these ends were in process of being definitely worked out.

One of the most helpful and constructive contributions, most needed at the present time, would be the formulation of policies of vocational education which will show clearly and definitely the relationships which a program for vocational education should bear to a program for health education, to a program for citizenship education, to a program for complete education.

In the past this country has suffered and been handicapped by the lack of engineers, scientists, and skilled mechanics, and took no adequate action. During the war the point was reached where measures for remedying this lack became an imperative necessity, and hence schemes for vocational and technical training were developed on an unheard-of scale. We came to realize that we must make a more determined effort to secure for a much larger proportion of our people a serviceable amount of technical and scientific training. In the accomplishment of this purpose we must vitalize the work of the elementary and secondary schools, as well as the higher engineering and scientific schools, and stimulate them to do their part in this great program.

SUGGESTIONS OF EDUCATORS.

For the purpose of aiding and guiding this development, the Commissioner of Education summoned to Washington during the week of May 20, 1918, a group of educators, and requested them to cooperate in the formulation of the outlines of a definite program that might be submitted to school authorities for adoption. The committee included men from the staffs of city superintendents of public schools, principals of high schools, representatives of trade and technical schools, and teacher-training institutions. This group was representative alike of the technical, administrative, and instructional phases of the problems involved, and pooled the results of extensive and varied experience in both education and industry.

Consequently, the program and recommendations of this committee, as set forth in a report published by the Bureau of Education,¹

¹ *Industrial Arts in Secondary Schools, etc.*; Secondary School Circular No. 4, September, 1918; Bureau of Education, Washington, D. C.

carry great weight, and deserve the careful study of school authorities. Included within the brief compass of 30 pages may be found definite, practical suggestions, some of which may be carried out in the seventh and eighth grades and high-school years in almost any school system in the country.

RECOMMENDATIONS.

The recommendations of the committee may be summarized briefly, as follows:

(1) Boards of education should make it possible to offer training preparatory to some of the occupations specified, at least the foundation work courses, in practically all high schools.

(2) Wherever practicable the cooperative shopwork plan (part-time division between schooling and employment) should be introduced, under the direct supervision of the public-school authorities.

(3) The daily, weekly, and annual school sessions should be lengthened.

(4) Wherever practicable a number of elective two-year vocational courses should be offered, with the following division of time: (a) 15 hours per week in shopwork; (b) 15 hours per week in related and general subjects.

(5) For industrial arts work in the general high school, the minimum amount of time should be 10 hours per week, for a period of three years.

(6) From 4 to 10 periods per week in the seventh and eighth grades should be devoted to handwork, with the emphasis on practical shopwork in wood and metal preparatory to the work suggested for the high school.

Other recommendations relate to consolidated and rural schools, and to the importance of securing properly qualified teachers to conduct the work.

The underlying purpose of the program and the recommendations presented in this report is twofold: (a) To increase greatly the number of boys and young men receiving instruction in technical and industrial work; and (b) to increase the practical effectiveness of the instruction by bringing about a more definite coordination between the work of the schools and the needs of the individual and the Nation.

CRITICISM EXAMINED.

In conclusion, it seems desirable to refer again to certain objections which have been raised to the philosophy underlying the vocational phases of public education. There are still those who appear to be unable or unwilling to perceive that education must be something more than mere cultivation of the intellect. It is difficult to

argue with such persons on the basis of the current conception of publicly supported education in a democracy, which is that education should include at least: (1) Education for citizenship and civic responsibilities; (2) education for health; (3) education for economic self-support, the vocation; (4) education for the human relationships, culture, refinement, use of leisure time, the spiritual values.

In particular, the notion that children who are about to leave school permanently, or who, having left, are recalled for the purpose, may safely be given specific instruction that will assist in getting an economic start in life—this notion has proved a stumbling-block to some who believe that this process involves the sacrifice of something of supreme value to the child and to the State. An attentive reading of certain criticisms which have appeared suggests that the argument, if reduced to the form of a syllogism, would read:

Major premise: Many children leave school as soon as they are legally free to do so, regardless of whether they are qualified to look after themselves or not.

Minor premise: An effective program of vocational education may induce numbers of such children to remain in school longer than they otherwise would in order to prepare for some wage-earning position.

Conclusion: This additional schooling definitely and permanently prescribes the future careers of the children, making it impossible that they shall ever be other than "hewers of wood and drawers of water," and is therefore an offense against both the individual and society.

The principal defect in this argument is that the process of reasoning is invalid, and the conclusion *non sequitur*. Students of education have repeatedly pointed out the fallacy of assuming that a vocation once entered upon by a young person must be followed through life.

Furthermore, the obvious alternative, and the only one seriously proposed, is to accept the fact that the overwhelming majority of boys and girls will continue to drop out of school before attaining adequate preparation for life's duties. And it is precisely against amiable acquiescence in this ineffectual alternative that current popular interest in education has been aroused.

VOCATIONAL EDUCATION NOT AN ENCROACHMENT.

One of the most conclusive summaries of the case against the criticism referred to is a statement recently prepared by Dr. Snedden. It is in answer to the thoughtlessly repeated charge that vocational education seeks (1) to destroy or supplant the public school, and (2) to establish or substitute a narrow type of education which, by teaching mere skill of hand, will limit the possible futures of young people and prescribe for them careers without prospect of growth and development.

In reply to these two charges it is aptly pointed out that, wherever vocational schools have been established, the entrance conditions are substantially the completion of the requirements of compulsory school attendance. In most States these requirements are expressed in terms of age of pupil and school grade completed.

In other words, no youth may enter a vocational school until he has reached the point where he is equally free to enter the shop or office as a full-time worker, or to spend his (or her) days exclusively at farm or home work. To the charge sometimes made that the specialized vocational school is "narrowing," it is a fair retort to question whether it is more "narrowing" than the place in the department store, the specialty in the factory, or the daily routine of office, farm, or home. For these are certainly the prevailing alternatives.¹

In this connection the following statement made by the Secretary of Commerce in President Wilson's Cabinet, and member of the Federal Board for Vocational Education, is pertinent:

Let me say that industrial education is not educating men into the mill. I have been told that it was, and that what was sought was to train a working class; that it attempted not only to train our children into the mills, but also to develop class legislation on their account. The allegations are utterly untrue. Industrial education is for every phase of industry, and those who teach it most and urge it strongest are against confining it to any narrow groove of single processes.²

Instead, therefore, of being chargeable with limiting the opportunities or prescribing the future careers of youth, the vocational school must fairly be credited not only with providing a substantial extension of educational opportunity, but also with equipping boys and girls with the means to make their careers whatever they will. Every step taken in the direction of providing practical education preparing for wage-earning efficiency will lessen rather than increase the handicaps which beset those boys and girls who can not look forward to college or university education.

¹ David Snedden: *Publicly Supported Vocational Education: Is it Undemocratic?*; *Manual Training Magazine*, Vol. XVIII, No. 8, April, 1917, pp. 321-324.

² William C. Redfield; *Manual Training Magazine*, Vol. XVIII, No. 6, April, 1917, p. 252.

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DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 26

The United States School Garden Army

By

J. H. FRANCIS
DIRECTOR

[Advance Sheets from the Biennial Survey of Education
in the United States, 1916-1918]



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1919

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THE UNITED STATES SCHOOL GARDEN ARMY.

By J. H. FRANCIS, *Director.*

This name was adopted in March, 1918. The work of the organization is an expansion of work undertaken by the Bureau of Education in 1914. The scale upon which it was done was limited by the finances that could be secured for it.

The acute demand for food production growing out of the war conditions made expansion possible.

Mr. P. P. Claxton, Commissioner of Education, addressed the following letter to Hon. Franklin K. Lane, Secretary of the Interior, on February 14, 1918:

MY DEAR MR. SECRETARY: For several years the Bureau of Education has been developing slowly, with a small appropriation, a plan of school-directed home gardening in cities, towns, villages, and suburban communities which has proved so effective, both for education and for food production, that I feel it to be almost imperative that it be put into operation at once in all parts of the country as one means of meeting the food emergency which now exists and will probably continue to exist for two or three years at least.

The plan consists in enlisting boys and girls between the ages of 9 or 10 and 14 or 15 in systematic garden work for food production on such plats of ground as can be had for this purpose near their homes, on back yards, side yards, and vacant lots, and then providing teacher-directors for them at the rate of one teacher-director for each group of from 100 to 150 garden workers. Parents and older brothers and sisters are induced to cooperate with the children whenever this is possible. The work of the children is done after school hours and on Saturdays and vacation days, so that no time is taken from school.

In the schools of cities, towns, villages, and suburban communities of the United States there are approximately 7,000,000 children of the ages given above; of these probably 5,000,000 would be able to find some space for gardening and can be induced to do systematic garden work under this plan. For their instruction and direction 40,000 teacher-directors will be needed, and in all the larger places there should be general superintendents and instructors of these teacher-directors. Under proper supervision this army of boys and girls may easily produce \$250,000,000 worth of food, which will reach the consumer in perfect condition without cost for transportation or handling and without loss through deterioration on the markets. An equal amount of other forms of food may thereby be released for exportation for the use of our armies and our allies overseas. Many millions of dollars may be produced and saved for investment in bonds or war savings stamps, and the children engaged in work will be benefited physically, mentally, and morally. Since the work will be done by children who would otherwise be idle, and on land which would not otherwise be used, there will be no cost except for supervision and direction and for tools, seeds, and fertilizers. Experience shows that the cost of these

does not exceed 10 per cent of the value of the food produced, and is often much less.

The Department of Agriculture has agreed to furnish to the Bureau of Education, for the promotion of this work, its bulletins and leaflets on gardening in such numbers as may be needed, and will ask its county agricultural agents and home-demonstration agents to use a part of their time in supervising and instructing teacher-directors when they have the ability and when this work does not take too much time from their other and more legitimate duties.

The States division of the Council of National Defense has promised to cooperate in raising money in State and local communities to pay the salaries of supervisors in places where this may be necessary. The National War Garden Commission will cooperate by donating in unlimited numbers its practical garden bulletins, and by printing for distribution at cost a daily record book which has been prepared by the Bureau of Education for keeping garden accounts.

But all this can be made effective only through the Bureau of Education, which, to enable it to stimulate and direct this work effectively, must have in the beginning approximately \$35,800, in addition to all funds which it now has, as is shown in the following table of estimates:

Estimate of cost for promoting school-directed home garden work.

One director.....	\$4,000
One assistant director.....	3,000
Fifteen stenographers, typewriters, and mailing and filing clerks.....	18,000
One messenger.....	800
Typewriting, multigraphing, and addressographing machinery and other equipment, and supplies and stationery..	10,000
Total	35,800

Because of the very great importance of this matter, and because of the fact that whatever is done must be done very quickly, I have the honor to request that you give it your very careful consideration, and if it commends itself to you, that you ask the President to make available to the Bureau of Education for this use so much of his War Emergency Fund as may be necessary for carrying on the work until other funds are available through congressional appropriation or otherwise.

Respectfully submitted,

P. P. CLAXTON,
Commissioner.

The honorable the SECRETARY OF THE INTERIOR.

Following this letter, and upon the request of Secretary Lane, President Wilson appropriated \$50,000 from the National Security and Defense Fund to promote school and school-supervised home gardening among the school children of America residing in cities, towns, and villages. Up to this time the field had been practically untouched by any governmental agency. In a few cities throughout the country, garden work had been undertaken by the schools and by civic organizations, but these instances were few in number.

Early in April, 1918, the following suggestions on plans of organization were sent to school superintendents and garden teachers and supervisors:

ORGANIZATION OF THE ARMY.

Number of members in a company: Ten to one hundred and fifty.

Age limit: Any school child, but preferably the more important companies should be enlisted from the pupils above the third grade.

Requirements for enlistment: The signing of an obligation card in which the pupil agrees to raise one or more food crops and to keep records of his work and the results, reporting them to the teacher or garden supervisor. These cards will be furnished by this bureau.

Officers: Each company to have a captain and one or two lieutenants, the latter depending upon the number of soldiers enlisted.

Insignia:

For the privates, a service bar with U. S. S. G. in red letters on a white background with a border of blue.

For the second lieutenant, the same bar with one white star in the border.

For the first lieutenant, the same bar with two white stars in the border.

For the captain, the same bar with three white stars in the border.

For the garden teacher or supervisor, similar insignia without stars, with blue letters and a red border.

Enlistment of existing organizations: Any organization of school children now doing garden work will be eligible to enlistment. Such organizations may keep their existing form, if they so desire and have the additional impetus of belonging to a national army fostered by President Wilson, the Secretary of Interior, and the Commissioner of Education. The aim of this army is to nationalize and unify the great work now being carried on among school children of America. ✓

Five regional and one general director were chosen to organize and carry forward the work. The regional directors were selected because of their expert and practical knowledge of gardening and their extensive experience as garden and agriculture teachers. Their duties were to include the writing of garden leaflets in language and form suited to the boys and girls of school age, and adaptable to class organization. Each region was to be furnished separate leaflets. They were to meet climatic and soil conditions of the district to which they were to be sent. As an illustration, the southeastern region has five zonal districts, and separate leaflets were written for each. These garden lesson leaflets were highly appreciated by teachers who were able through their help to conduct companies successfully through the garden season.

A partial report made July 10, 1918, showed the following results:

1. One million five hundred thousand boys and girls responded to the call of the President and enlisted in the United States School Garden Army. ✓

2. Twenty thousand acres of unproductive home and vacant lots were converted into productive land. This released an equal acreage used in truck gardening for the production of other foodstuffs more important for war purposes. It relieved transportation congestion through home consumption of home-produced foodstuffs.

3. Fifty thousand teachers received valuable instruction in gardening through the garden leaflets written by experts in this office and distributed from here. One million five hundred thousand leaflets were sent out.

4. Boards of education and other civic organizations were influenced to give financial and moral support to the school and home garden movement and to pay extra salaries for supervision and teaching.

5. Hundreds of thousands of parents became interested in the garden movement and worked with their children in home gardens. In Salt Lake City alone 5,200 mothers, representing 62 parental associations, actively supported food production in the schools.

6. Thousands of civic, commercial, and patriotic organizations became interested in the movement and gave it hearty support.

7. One and one-half million children were given something to do last summer; something that helped to carry the burden of their country in the struggle for freedom, something that helped them to build character, and something that appealed to and developed their patriotism.

8. Home and vacant lot gardening in cities, towns, and villages was dignified and made popular to a degree that practically insured it a prominent place in the school system of our country. It would be difficult to estimate the educational and material value of such results. No other movement in history promises so much in aiding the "back-to-the-soil" movement as this.

President Wilson made a second appropriation of \$200,000 to continue the work until July, 1919, and some changes were made in the organization.

A slight readjustment of territory assigned to the regional directors was necessary. The southeastern region was enlarged by adding West Virginia, Alabama, and Mississippi from the southern region. The southern region in turn was given Missouri and Kansas from the central section and Colorado and New Mexico from the western section. The five regional directors remain the same as before the new adjustment.

Twenty-five assistant regional directors were appointed. The duties of the assistant regional directors are similar to those of the regional directors, but are on a more intensive scale and in a more limited territory. They work under the direction of the regional director in a part of his territory assigned to them and make weekly reports to him.

Under this organization the United States School Garden Army is working for the season 1918-19.

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DEPARTMENT OF THE INTERIOR
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BULLETIN, 1919, No. 27

RECENT PROGRESS IN NEGRO EDUCATION

By

THOMAS JESSE JONES

[Advance Sheets from the Biennial Survey of Education
in the United States, 1916-1918]



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1919

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RECENT PROGRESS IN NEGRO EDUCATION.

By THOMAS JESSE JONES.

CONTENTS.—Introductory—State supervisors—Jeanes industrial teachers—County training schools—Rosenwald schools—Phelps-Stokes fund—Public school facilities—Recent publications—Educational meetings—Church boards—Private and denominational schools.

The past year has witnessed considerable progress in the field of negro education, despite adverse conditions brought about by the war. Probably the most significant event of the year was the appointment in Texas of a State supervisor of rural Negro schools, whose salary and expenses are paid entirely by the State. Short terms, poor schoolhouses, and low salaries continue to hamper the works of the public schools, but the problem of Negro education has been called to the attention of the white South by the recent exodus of Negroes from that section, and some improvement has already been made. While there has been a considerable increase in the actual amounts appropriated by the Southern States for salaries of colored teachers, the Negroes still receive no greater proportion of the sums expended for teachers' salaries. The official reports of State superintendents of public instruction show that these officials are trying to increase the school facilities for Negroes and are calling the attention of the public to the matter. During the year bulletins and leaflets dealing with various phases of Negro education have been published by State departments of education.

The number of Jeanes industrial teachers has increased, and their work has been so effective that one State superintendent recommends in his official report that similar supervisors be employed for white schools. The cooperation of the General Education Board has enabled these teachers to organize home makers' clubs during the summer months. In doing this home club work the teachers give demonstrations of cooking, canning, and preserving. The General Education Board has also cooperated with the States in maintaining supervisors of rural schools and in furnishing equipment for county training schools. The county training schools, supported by the counties with the aid of the Slater fund, have passed the experimental stage, and only the high cost of labor and materials prevented the building of additional schools during the year. The Rosenwald fund has made possible the erection of a number of rural school-

houses. The Phelps-Stokes fund, which financed the investigation of negro education, continues to cooperate with the Bureau of Education. Its work has been the maintenance of an information bureau, giving expert advice to schools and keeping before the public the educational needs of the Negro.

The private and higher schools have had a very difficult year, because of the high cost of supplies, the difficulty of raising funds, and the loss of teachers and students who joined the military forces or went into some form of war work. The faculties of the strongest schools were heavily drawn on by the Government and other agencies seeking men for responsible positions. All schools with sufficient equipment cheerfully assumed the additional burden of training soldiers and giving special courses to students, in order to meet the needs of the Army. Cooperation between denominational and independent schools, public authorities and educational funds, has been furthered by a committee on Negro education appointed by the Commissioner of Education.

STATE SUPERVISORS.

At present 10 States, with the assistance of the General Education Board, maintain supervisors of Negro rural schools. Oklahoma and Florida are the only States with a considerable proportion of negroes that have no special supervisor. In Texas the supervisor is paid entirely by the State.

The work of the State supervisors may be briefly summarized under four heads: (1) The improvement of school facilities, by urging county superintendents and boards of education to extend school terms, pay better salaries, and provide better houses. (2) The development of county training schools, maintained by the counties with the help of the Slater fund. The first object of these schools is to train teachers for the rural schools. In offering some high-school work and industrial training, these schools are rendering a large service. (3) The improvement of teachers in service by conducting county institutes, and cooperating with State normal schools and summer schools conducted by private institutions. (4) The promotion of home-makers' clubs. In North Carolina and Mississippi the State supervisor has a colored man to assist him in his work. In North Carolina the salary of this assistant is paid by the State Colored Teachers' Association; in Mississippi it is paid by the State. The work of these assistants has been of great value.

JEANES INDUSTRIAL TEACHERS.

The following statement of the work of the Jeanes fund teachers, who are county industrial supervisors, is furnished by the director of the Jeanes fund:

The Jeanes fund, for the improvement of Negro rural schools, cooperated during the session ending June 30, 1918, with public school superintendents in 209 counties in 14 States.

The supervising industrial teachers, paid partly by the counties and partly by the Jeanes fund, visited regularly in these counties 5,717 country schools, making in all 20,903 visits and raising for purposes of school improvement \$204,646. The total amount of salary paid to the supervising teachers was \$65,182, of which the county school authorities paid \$25,334 and the fund \$39,848.

The business of these traveling teachers, working under the direction of the county superintendent, is to introduce into the small country schools simple home industries; to give talks and lessons on sanitation, personal cleanliness, etc.; to encourage the improvement of schoolhouses and school grounds; and to conduct gardening clubs and other kinds of clubs for the betterment of the school and the neighborhood.

The table here given shows the extent of the work done by these teachers, and how it is financed:

Negro rural school fund, Jeanes Foundation, 1918-19.

States.	Number of teachers.	Number of counties.	Paid by Jeanes fund.	Paid by public fund.
Alabama.....	¹ 24	23	\$5,223.00	\$3,806.83
Arkansas.....	¹ 20	19	2,928.75	7,750.00
Florida.....	4	4	1,055.00	612.00
Georgia.....	24	24	3,810.00	3,060.00
Kentucky.....	¹ 9	9	1,995.00	1,065.00
Louisiana.....	¹ 15	14	4,185.00	2,348.00
Mississippi.....	¹ 26	25	4,110.00	6,535.00
North Carolina.....	39	39	5,815.00	7,665.00
South Carolina.....	14	14	3,465.00	1,708.00
Tennessee.....	20	21	3,567.50	5,110.00
Texas.....	6	6	1,540.00	1,300.00
Virginia.....	¹ 16	18	2,973.00	3,132.00
Total.....	¹ 217	216	40,637.25	44,591.83

¹ Including State supervising teachers.

Several of the State supervisors have found it wise to concentrate their efforts on counties where Jeanes teachers are at work. In Alabama, Kentucky, Louisiana, North Carolina, and Virginia there is a State supervising teacher. The work of the Jeanes teachers in Alabama is described in the following paragraph from the 1917 annual report of the department of education:

SUPERVISION OF SCHOOLS.

As an aid to the county superintendents and county boards of education charged with the supervision of all schools in their respective counties, it has been possible to place in 24 counties, through assistance from the Jeanes Foundation, 27 supervising industrial teachers, all of whom, with the exception of one man, are women with special training in industrial work. They supervise the elementary industrial training in the rural schools of the county, and assist in the general supervision of the Negro schools. The fact that in 1913 there were only 12 of these supervisors employed and that last year the number had increased to 27 shows the success with which these workers are meeting. There is a growing disposition on the part of the counties to bear

an increased proportion of the salaries of these workers, who have proved themselves to be of inestimable value to the school officials and people of their respective counties.

That State school officials have seen the value of the work done by the Jeanes supervisors is shown by the following quotation from the annual report of the superintendent of public instruction of Virginia, for the year 1916-17:

COLORED SUPERVISORS AND THE LESSON THEY TEACH.

Some of life's best lessons are taught by the simplest and most obvious illustrations, as in the case of the sluggard who was advised to observe the unrecognized ant; and so we may say that if any man will observe the work of the colored demonstrators or supervising teachers—men and women whose services have been almost thrust upon the State by private generosity—he can not hesitate for a moment in deciding what is the next step in the development of our work among the white children. These colored leaders have increased teachers' salaries; they have also lengthened the term and have brought into the schools so many new children that the taxpayer has found the per capita cost materially reduced.

COUNTY TRAINING SCHOOLS.

At present there are 77 of these institutions, and several others will be erected as soon as the abnormal price conditions of war times have passed. They are divided among the States as follows: Alabama, 11; Arkansas, 5; Florida, 1; Georgia, 5; Kentucky, 2; Maryland, 1; Louisiana, 4; Mississippi, 3; North Carolina, 14; South Carolina, 6; Tennessee, 6; Texas, 5; Virginia, 8. These schools are built and maintained by the combined efforts of the public-school authorities, the Slater fund, the colored people of the county, and the local white friends of Negro education. This quotation from the report of the superintendent of public instruction for North Carolina, 1915-16, shows the plan under which the county training schools are built and maintained:

The establishment of three county training schools was mentioned in my first biennial report. These began work in the fall of 1914 in the counties of Johnston, Pamlico, and Wake. These schools are established by the county boards of education on the recommendation of the county superintendents. Their main support is apportioned from public-school funds. Some aid for current expenses is given by the Slater fund, and the General Education Board has made donations for equipment.

The best statement I have seen of the need of such schools, their purpose, and the conditions for receiving outside financial aid is made by Dr. James H. Dillard, director of the Slater fund. It is as follows:

One of the greatest immediate needs is for even fairly competent teachers in the small public schools. The Slater fund has contributed much to the preparation of teachers, but in the past its contributions in this direction have been mainly to the larger and higher institutions. There is now great need for the preparation of teachers in a lower grade of advancement. The immediate conditions under which such work must be done may be far from ideal;

but the effort faces facts as they are. It is a fact that a very large majority of the teachers in the small rural schools for negroes have got what they have of education and training in their own or a neighboring county. Many superintendents are showing interest in the improvement of some central school in the county, which may serve the purpose of supplying a somewhat better grade of teachers.

Aid from the Slater fund is given on the following simple conditions:

First. That the school property shall belong to the State or county, thus fixing the school as a part of the public-school system.

Second. That there shall be an appropriation of at least \$750 from the public funds for maintenance.

Third. That the teaching shall be carried strictly and honestly through at least the eighth grade, including industrial work, and in the last year some training, however elementary, for the work of teaching.

Under these conditions the Slater fund has agreed to appropriate \$500 for maintenance, and in the first year, where new buildings or repairs may be necessary, to aid in supplying these in cooperation with amounts raised from other sources.

The regular State public-school course of study is followed in all the schools through the seven elementary grades. In the eighth and ninth grades, where there is a ninth grade, the State high-school course is followed with negro history substituted in most cases for ancient history, simple teacher training, and industrial work for the classics. An effort is made to teach the simple home industries throughout the school. These consist of cooking, sewing, house-keeping, laundry work, gardening, manual training, and the like. Last spring several of the schools made fly screens and endeavored to get the people in the communities generally to use them. Very fine gardening work was done at the Method School.

Each of these schools receives annually \$500 from the Slater fund for current expenses. The General Education Board gave \$1,164 for industrial and other equipment for the three schools in 1914-15, and \$3,160 for the same purposes for the five schools in operation in 1915-16.

One of the schools, Parmele, in Martin County, received \$2,000 from the Phelps-Stokes fund in 1915 to aid in building. Three others received a total of \$1,300 for the same purpose from the Slater fund in 1915-16.

All these appropriations were made to supplement local funds to be used for the purposes named.

At the Berry O'Kelly School, Wake County, a splendid new modern brick building is just being completed. When completed, the plant will cost more than \$10,000. The Martin County school moved into a nice new brick building in 1915. Repairs and improvements have been made in the other three counties. Small, but satisfactory, industrial buildings were erected in Johnston, Pamlico, and Sampson Counties.

ROSENWALD SCHOOLS.

The following letter, sent to county superintendents in Georgia by the supervisor in that State, explains how the Rosenwald fund is being used to promote the building of good schoolhouses for colored children: .

To County Superintendents of Schools:

GENTLEMEN: The Rosenwald fund is available for assistance in constructing model colored school buildings, in cooperation with local communities and county authorities. This fund is offered for the purpose of encouraging the construction of modern model schoolhouses. Such houses will doubtless im-

prove the kinds of residences of the people and tend to elevate the moral and civic ideals of the people.

It is insisted that good schoolhouses should be built in suitable places to be approved by the county boards of education, and should be built after an approved plan. It is further urged that the titles to public school property should be held by the county boards of education.

Small district schools, in the absence of natural barriers, should be consolidated, thus bringing two or more one-teacher schools into a larger one. Combining such communities, when it can be done, will create more enthusiasm and render available larger assistance in constructing schoolhouses.

It is useless to say that we, as friends and neighbors of the colored people, are and should be much interested in their schools and school buildings. The encouragement of the white people and school authorities is quite helpful in developing school pride and improvements.

Upon compliance with the following conditions, participation in the Rosenwald fund is possible:

1. The schoolhouse is to be for country children, and small towns may be interested.
2. From 2 to 5 acres of land are to be secured by the colored people, at a place approved by the school board, and the property is to be deeded to the board of education for colored school purposes.
3. The county superintendent, the patrons, and the undersigned are to agree upon a plan of building.
4. The superintendent of schools shall handle the funds and direct the construction of the building.
5. The community and county authorities must guarantee the completion and equipment of the building. The house shall be painted inside and outside with at least two coats of paint; each classroom must contain at least 20 lineal feet of good blackboard and have suitable desks for pupils and teacher; the building must contain at least two cloakrooms, a workroom, and a small kitchen. The smoke flues must be built from the ground.
6. Two closets, properly located, must be built.
7. It is understood that the school shall be run at least five months each year.

PROPOSITIONS.

For a one-teacher schoolhouse the community and county authorities must raise in cash, material, and labor, \$750. The Rosenwald fund will contribute \$400.

For a two-teacher house the community and county authorities will raise, as above, \$1,000. The Rosenwald fund will give \$500.

In cases of consolidation of two or more schools the Rosenwald fund will contribute more.

Any and all parties interested in this much-needed work will address the writer at Milner, Pike County, Ga.

Respectfully,

Geo. D. GODARD,
Special Rural School Supervisor.

The Rosenwald fund is handled by the extension department of Tuskegee Institute. The table below, furnished by the institute, shows how the Rosenwald schools have been built and how they are divided between the several States:

RECENT PROGRESS IN NEGRO EDUCATION.

9

Data of rural schoolhouse building aided by Mr. Julius Rosenwald.

(As of September 1, 1918.)

States.	Number of school-houses.	Amounts contributed by—				
		States.	White people.	Colored people.	Mr. Rosenwald.	Total.
Alabama.....	179	\$43,776.00	\$3,445.00	\$91,764.98	\$55,450.00	\$199,436.98
Arkansas.....	22	10,525.00	1,435.00	8,654.00	9,500.00	30,114.00
Georgia.....	28	2,975.00	10,502.00	17,532.00	7,800.00	38,809.00
Kentucky.....	5	6,045.00	250.00	5,041.50	2,600.00	12,936.50
Louisiana.....	49	9,300.00	3,000.00	33,990.00	17,000.00	63,290.00
Maryland.....	4	2,700.00	500.00	1,125.00	1,450.00	5,775.00
Mississippi.....	28	3,612.50	13,642.95	19,253.25	12,275.00	48,787.70
North Carolina.....	85	31,631.00	3,228.80	38,787.75	24,865.00	98,739.25
South Carolina.....	9	3,300.00	3,378.00	6,696.00	3,900.00	21,274.00
Tennessee.....	59	72,905.00	3,870.00	26,150.00	39,175.00	142,100.00
Virginia.....	38	29,555.00	750.00	21,784.30	19,800.00	68,889.30
Total.....	501	213,345.80	54,899.45	265,179.28	193,616.00	726,940.18

The above figures represent amounts put in the construction and furnishing of the school buildings. Besides the \$193,616 spent in this way by Mr. Rosenwald, he has put in \$23,406.84 up to September 1 by way of agents' salaries, traveling expenses, etc., in promoting the movement for better schoolhouses in various States.

PHELPS-STOKES FUND.

For the past five years the Phelps-Stokes fund has financed a staff of workers in the Bureau of Education. Since the publications of Bulletins 38 and 39, 1916, the agents of the fund, as special collaborators of the Bureau of Education have followed up the study of Negro education with constructive work. One member of the staff who is trained in business methods and accounting gives all his time to the improvement of accounts and records in the schools. Schools have been given assistance in their efforts to adapt their courses to the needs of their pupils and community. Fraudulent Negro schools have been exposed, and the needs of worthy institutions brought to the attention of interested persons. A bureau of information has been maintained. Campaigns for the teaching of gardening and for the improvement of living conditions in dormitories have been carried on. The fund's agents have kept in touch with educational boards of the various churches, other educational funds, the public-school authorities in the several States, independent schools and land-grant colleges, and have endeavored to have these agencies coordinate their efforts. Individual schools have been given financial aid for maintenance. Fellowships for the study of the race question have been established at two State universities in the South. The relationship now existing between the Bureau of Education and the Phelps-Stokes fund will cease by operation of law on July 1, 1919, and no appro-

priation has been made to carry on the work of the Bureau of Education for colored schools.

PUBLIC SCHOOL FACILITIES.

The public schools for Negroes in the South, especially in those counties where the negroes outnumber the white people, are not doing efficient work, because of small salaries paid to teachers, short terms, and poor school buildings. In the annual report of the Alabama Department of Education we find the statement that:

The amount paid for salaries in the public schools of the State amounted to \$3,145,604 for white teachers—an average annual salary of \$431 for each man and \$363 for each woman, almost precisely what they were the year before, and despite the fact that the high cost of living is constantly increasing.

As for the Negro schools, we learn that:

In the schools for negro children last year 641 men and 1,931 women were employed. There was a slight decrease in the number of both men and women, due to the egress of Negroes to other States. There was expended in the form of salaries upon the teachers so employed \$399,970, a decrease of \$20,185 from the preceding year. The average salary paid to each man was \$167 and to each woman \$152, and the length of the school term was 104 days.

The report has this to say about the Negro teachers in Alabama:

The grades of certificates held by that portion of the 2,572 teachers who were required to hold State certificates were as follows:

Life	120
First grade.....	23
Second grade.....	606
Third grade.....	1,802

So far as the qualifications of the teachers are concerned, there seems to be no improvement over the preceding year.

The results of the inadequate public-school facilities appear from the discussion of school attendance in the report:

ATTENDANCE.

The average attendance in schools for whites in 1915-16 was 214,294, and in 1916-17 an increase of 5,740 brought the total up to 220,034. It is to be remarked that this net increase was the result of approximately a 3 per cent increase in the number attending elementary grades and of a 24 per cent increase in the number attending in high-school grades. Based on the latest census returns, the percentage of attendance upon enrollment was 63. Because of the removal of Negroes to the East and North, the average attendance in their schools showed a decrease of 3,450 from the number for 1915-16, of 97,384.

Using the school census as a basis, 50 per cent of the white boys and girls were in average daily attendance and 29 per cent of the Negro boys and girls. Making due allowance for those of school age who attended district agricultural schools, county high schools, private denominational and parochial schools, and institutions of college and secondary grade, the results are still far from satisfactory, as the following tables will show:

Enrollment.

Year.	Rural.		Urban.	
	White.	Negro.	White.	Negro.
1915-16.....	292,960	135,807	51,521	23,814
1916-17.....	293,389	133,325	54,838	23,404

Average attendance.

Year.	Rural.		Urban.	
	White.	Negro.	White.	Negro.
1915-16.....	174,170	85,417	40,134	15,426
1916-17.....	178,666	82,660	41,368	14,724

From an examination of the above, it would appear that there has been a somewhat normal increase both in rural and in urban enrollment and attendance in white schools and a positive decrease in the case of negro schools. This latter condition is due to the leave-taking of the negroes as already suggested.

From the above quotations it will be seen that the superintendent of education in Alabama explains the decrease in the number of Negro teachers and pupils by the migration of Negroes from the South. The white men and colored men who have investigated the movement are agreed that the poor public-school facilities were among the most important causes of the exodus.

The following table shows the increases in the amounts appropriated for the salaries of Negro teachers in five of the Southern States. The figures for the earlier years are those used in Bulletin 89, 1916. It will be seen that, while in every case there has been an actual increase, there has been very little increase in the proportion of the total salaries, and in the case of Florida and North Carolina there have been actual decreases in the proportion. In considering the figures in the table it should be remembered that between 1900 and 1910 the white population of the Southern States increased faster than the colored, and it is only reasonable to assume that this has been the case since 1910.

Increase in salaries of Negro teachers in five States.

States.	Date of report.	Salaries.	Per cent of total.	Date of report.	Salaries.	Per cent of total.
Florida.....	1910-11	\$167,381	14.2	1916	\$214,291	11.6
Georgia.....	1911-12	483,622	14.3	1917	555,822	14.8
Louisiana.....	1911-12	211,376	7.0	1915	263,515	7.0
North Carolina.....	1910-11	340,856	16.6	1916	563,273	14.1
Virginia.....	1911-12	421,381	13.2	1916-17	626,565	14.7

INCREASED INTEREST ON PART OF PUBLIC-SCHOOL OFFICERS.

That educators and other leaders of thought in the South realize that the situation calls for action is shown by the official reports of State superintendents of education. In his biennial report for the school years 1914-1916, the superintendent of public instruction devotes several pages to a discussion of the education of the Negro. The last two paragraphs of his statement are reproduced here as expressing what may fairly be considered the attitude of the thinking white people of North Carolina:

This question of Negro education is, after all, not a question of whether the Negro shall be educated or not, for it is impossible for any race to remain in this great Republic in the twentieth century uneducated. The real question is, therefore, how he shall be educated and by whom it shall be done. If his education is not directed by us, others that do not understand our social structure, that are ignorant of the nature and needs of the Negro and have false notions of his relation to the white race in the South, will take charge of it. Our safety, then, lies in taking charge of it ourselves and directing it along lines that shall be helpful to him and to us and in harmony with our civilization and society and with his nature.

There is another phase of this problem of Negro education worthy of the serious consideration of our people. It is manifest to me that if the Negroes become convinced that they are to be deprived of their schools and of the opportunities of an education, most of the wisest and most self-respecting Negroes will leave the State, and eventually there will be left here only the indolent, worthless, and criminal part of the Negro population. Already there has been considerable emigration of Negroes from the State. There is no surer way to drive the best of them from the State than by keeping up this continual agitation about withdrawing from them the meager educational opportunities that they now have. Their emigration in large numbers would result in a complication of the labor problem. Some of our southern farms would be compelled to lie untenanted and untilled. The experience of one district in Wilson County some years ago illustrates this. The county board of education found it, for various reasons, impossible to purchase a site for a Negro schoolhouse. Before the year was out the board received several offers from farmers in the district to donate a site. Upon inquiry by the chairman of the board as to the reason of these generous offers, he was told that when it was learned that no site for the schoolhouse could be secured and that the Negroes were to have no school in that district at least one-third of the best Negro tenants and laborers there moved into other districts, where they could have the advantages of a school. This is a practical side of this question that our people would do well to consider. What happened in this district will happen in the entire State if we give the best Negroes reasonable grounds to believe that their public-school privileges are to be decreased or withdrawn.

In his annual report for 1916-17, the superintendent of public instruction of Virginia says:

COLORED SCHOOLS.

Our seventh department of special effort was concerned with the negro schools. We rejected the idea that the Negro should remain uneducated, but were just as firmly of the opinion that the old type of scholastic education

which has been provided for him was in many respects a misfit. In our efforts to give him a better chance mentally, morally, and physically we have been aided at every turn by the wise and earnest men who have been placed in charge of the General Education, Slater, and Jeanes funds, and very largely also by the administrative officers of both our Federal land-grant schools, the Virginia Polytechnic Institute, and the Agricultural and Industrial Institute at Hampton.

Nearly every county in Virginia with a large Negro population is now served by a colored industrial supervisor, part of whose salary is paid by one of the foundations named above or out of the Smith-Lever fund, which is disbursed by the Virginia Polytechnic Institute. These supervisors have gone among the colored people and urged them, first, to build schoolhouses; second, to lengthen the school term; third, to put their children in school. They have also fostered the industrial type of training which has grown so much in favor among both white and colored teachers during recent years. Our own State school for colored youth, the Virginia Normal and Industrial Institute, at Petersburg, the Colored State Teachers' Association and the Negro Organization Society have also contributed intelligently and powerfully to the success of this movement.

WORK OF THE NEGRO SUPERVISORS.

During the 1916-17 session 49 supervising industrial teachers were employed to assist in the supervision of the Negro schools of 48 counties and 2 cities. Their instructions were to introduce industrial work as far as practicable and to encourage other forms of educational progress. Something of the magnitude of the work of these teachers and the results obtained may be brought out by mentioning the following facts:

In the 48 counties in which they worked there reside 68.1 per cent of the Negro children of school age in the counties of Virginia, 61.5 per cent of whom were enrolled in the schools; 8,389 visits were paid to 1,864 teachers working in 1,024 buildings; 607 of these teachers extended their school terms partly through money raised by the people, for which purpose they report the raising of \$9,640.74.

The supervising industrial teachers report that 851 of the 1,024 buildings under their supervision have active school improvement leagues, and report further that in addition to the money raised for term extension they raised for other purposes \$34,361.09, making a total voluntary tax for school purposes in the 48 counties with supervisors of \$44,011.83. To secure this splendid addition to the school revenues the counties expended a little over \$8,000 for the salaries of the supervising industrial teachers, the sum total of whose salaries amounted to a little less than \$25,000.

The superintendent of education in South Carolina, in his report for 1918, points out the difficulty that has hindered the development of an effective public school system for Negroes—the lack of a public sentiment favoring Negro education. In recommending a special appropriation of \$20,000 to be expended for the betterment of Negro schools, he says:

NEGRO SCHOOLS.

For the first time in the history of our public school system, the State superintendent's office has undertaken definitely the betterment of our Negro schools. Through the cooperation of the General Education Board of New York, the salary and the traveling expenses of a State agent for Negro schools have been secured.

The task is difficult. Houses, terms, salaries, equipment, standards—all these are low. Funds are limited. A foundation must be laid in public opinion and in public support before a definite program can be outlined and undertaken.

The present welfare and the future progress of the State are indissolubly linked with the development of our entire population. A careful perusal of the chapter dealing with Negro schools will show specifically the work undertaken during the year. The cooperation of outside agencies is readily acknowledged. The attitude of the Negro has been appreciative, and in my opinion the time has come when the general assembly ought to authorize and direct a campaign for better health and better industrial conditions among our Negroes.

The foundation for such an effort lies in the schools. The prejudice that has long hampered the progress of the Negro youth has been largely modified by the events of the past two years. The first step in the program for their betterment would be a modest appropriation to be expended solely in Negro schools.

RECENT PUBLICATIONS.

From time to time the various State departments of education issue pamphlets showing the progress that has been made in Negro education. As representative of these, Bulletins 9 and 10 of the Georgia Department of Education may be cited. These leaflets contain the reports of the Home Makers' Club Workers and the Jeanes Industrial Teachers. The Department of Public Instruction in North Carolina issues a "Monthly Progress Letter" reporting the activities of field workers in that State. The most significant publication of the year is one issued by the Louisiana Department of Education, entitled "Aims and Needs in Negro Public Education in Louisiana." The frank and fearless discussion of the problem, contained in this bulletin, is shown by the following paragraph:

It may be well to point out here that in some sections of the State the Negro is not receiving for the education of his race the direct school taxes that he contributes. To fail to grant him this amounts to confiscation. Segregation of funds or taxes for the two races is undesirable, but let us not take from the negro, by throwing all tax money into a general fund, what he is clearly entitled to. Surely this includes a just share of State taxes, a just share of corporation taxes, all fines that his race pays, and the indirect school taxes that he pays as renter and as laborer in helping to produce the wealth of the State. In dealing with this question we must learn to apply the same standards of honesty and fairness that we use in dealing with the different white schools and white communities. Only through the exercise of justice and fair play may we expect justice and fair play in return, and as a result of this, good feeling and good citizenship.

EDUCATIONAL MEETINGS.

The National Association of Teachers in Colored Schools held its fifteenth annual meeting at Harpers Ferry, W. Va., July 31 to August 2. This was the most important educational gathering of the year. A number of State teachers' associations met during the year. These associations have worked to raise the standard of the

teaching profession, and have cooperated with State superintendents in many ways. On account of war conditions, the Association of Colleges for Negro Youth was unable to hold its annual meeting.

CHURCH BOARDS.

The American Baptist Home Mission Society has adopted the policy of concentrating its efforts at one or two schools in a State, and has therefore withdrawn its aid from some schools which it supervised but did not control. The American Missionary Association is following the policy of discontinuing schools where the public school facilities become adequate, and increasing the support of other institutions. The Freedmen's Aid Society of the Methodist Episcopal Church has discontinued its appropriation to Walden College, at Nashville, Tenn., and the property of Walden has been given to Meharry Medical College. The board has decided to sell the property of New Orleans College, at New Orleans, La., and of Gilbert Industrial Institute, at Baldwin, La. Only one school will be maintained by this board in Louisiana. It will be located in a section where a secondary school is needed.

The Christian Woman's Board of Missions now maintains five schools, and property has been purchased for another one. The Presbyterian Board of Missions to the Freedmen reports new presidents at two schools maintained by the board. The Society of Friends has determined on the policy of enlarging the Cheyney Training School for Teachers, at Cheyney, Pa. The American Church Institute for Negroes of the Protestant Episcopal Church reports a growing appreciation of the importance of accurate accounting and businesslike administration in the schools under its control.

The educational boards of the African Methodist Church, the A. M. E. Zion Church, the Colored Methodist Episcopal Church have given evidence of their willingness to improve the accounting, buildings, and supervision of students in the schools under their control.

PRIVATE AND DENOMINATIONAL SCHOOLS.

The financial problems which many of the private and denominational schools now face were brought to the attention of the public by the Commissioner of Education in the following circular letter, which was sent by the bureau to 5,000 persons interested in Negro education:

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, October 8, 1918.

DEAR SIR: I am writing to call your attention to the special war-time needs of many of the colored schools.

As you know, most of the secondary and higher schools for Negroes in the South are supported by private philanthropy. These schools are largely de-

BULLETIN OF THE BUREAU OF EDUCATION FOR 1919.

- No. 1. Monthly record of current educational publications, January, 1919.
- No. 2. Standardization of medical inspection facilities. J. H. Berkowitz.
- No. 3. Home education. Ellen C. Lombard.
- No. 4. A manual of educational legislation.
- No. 5. Instruction in music, 1916-18. Waldo S. Pratt.
- No. 6. The half-time school. H. W. Foght.
- No. 7. Rural education. H. W. Foght.
- No. 8. Life of Henry Barnard. Bernard C. Steiner.
- No. 9. Education in Great Britain and Ireland. I. L. Kandel.
- No. 10. Educational work of the churches in 1916-18.
- No. 11. Monthly record of current educational publications, February, 1919.
- No. 12. Education in the Territories and dependencies, 1916-18.
- No. 13. Review of educational legislation, 1917 and 1918. Wm. R. Hood.
- No. 14. Monthly record of current educational publications, March, 1919.
- No. 15. The adjustment of the teaching load in a university. L. V. Koos.
- No. 16. The kindergarten curriculum. Almira M. Winchester.
- No. 17. Educational conditions in Spain. Walter A. Montgomery.
- No. 18. Commercial education, 1916-18. Frank V. Thompson.
- No. 19. Engineering education, 1916-18. F. L. Bishop.
- No. 20. The rural teacher of Nebraska.
- No. 21. Education in Germany. I. L. Kandel.
- No. 22. A survey of higher education, 1916-18. S. P. Capen and W. C. John.
- No. 23. Monthly record of current educational publications, April, 1919.
- No. 24. Educational work of the Boy Scouts. Lorne W. Barclay.
- No. 25. Vocational education. William T. Bawden.
- No. 26. The United States School Garden Army. J. H. Francis.
- No. 27. Recent progress in negro education. Thomas Jesse Jones.
- No. 28. Educational periodicals during the nineteenth century. Sheldon E. Davis.
- No. 29. Schools of Scandinavia, Finland, and Holland. Peter H. Pearson.
- No. 30. The American spirit in education. C. R. Mann.
- No. 31. Summer schools in 1918.
- No. 32. Monthly record of current educational publications—Index, February, 1918—January, 1919.
- No. 33. Girl Scouts as an educational force. Juliette Low.
- No. 34. Monthly record of current educational publications, May, 1919.
- No. 35. The junior college. F. M. McDowell.
- No. 36. Education in Italy. Walter A. Montgomery.
- No. 37. Educational changes in Russia. Theresa Bach.
- No. 38. Education in Switzerland, 1916-18. Peter H. Pearson.
- No. 39. Training little children. Bessie Locke.
- No. 40. Work of the Bureau of Education for the natives of Alaska, 1917-18.
- No. 41. An educational study of Alabama.
- No. 42. Monthly record of current educational publications, June, 1919.

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 28

Educational Periodicals During the Nineteenth Century

By SHELDON EMMOR DAVIS
STATE NORMAL SCHOOL, MARYVILLE, MO



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INTRODUCTION.

This study includes consideration of periodicals for the promotion of public-school education, those which deal with the history or scientific study of education, or the technique of schoolroom work, improvement of teachers and general school news. It excludes, at least from all attempt at comprehensive treatment, college and normal school papers; religious, church, and Sunday school publications; periodicals devoted to Indian or Negro education, private or parochial schools, and institutions or the interests of defectives; those designed to promote business college or commercial education, voice culture, and elocution; school papers issued by or for local city school systems, and mere advertising sheets. The principal source of information, fully indicated in the bibliography, has been the periodicals themselves, of which about 1,400 volumes have been examined, two-thirds of this number being studied in detail. Very few of the articles which have attempted to treat the history of individual groups of this class of publications can be depended upon as to the accuracy of their facts; they have been of great assistance in finding material, and when corroborated by other independently derived evidence it has seemed safe in a few cases to accept their statements. For convenience the term "school journal" will be used quite frequently in discussion, with the recognition at the outset that in content, purpose, and general character, the periodicals included by it are by no means a uniform class. Such variations as occurred are part of the subject matter of the study, and there need be no occasion for misunderstanding if Barnard's American Journal of Education, the School Review, the Indiana School Journal, and the Normal Instructor should be referred to as educational periodicals, journals of education, or school journals. As a rule, in general references to a periodical as a series, only the date of its origin is given in the text; by means of the chronological list at the close of the study any publication may be more fully identified.

EDUCATIONAL PERIODICALS DURING THE NINETEENTH CENTURY.

Chapter I.

ANTECEDENTS AND BEGINNINGS.

School journals, in the restricted sense of periodicals for teachers as a class, could not exist before there was a well-defined and somewhat professionally minded teaching group. As in other social instrumentalities, progressive specialization is in evidence, and the origin of technical pedagogical literature must be sought in general works devoting a varying degree of attention to schools, teachers, and education. In looking for historical precedents for educational periodicals in the United States, it is possible to go back for beginnings at least a hundred years before any such publications were actually established in this country. A careful study of that phase of the subject would show that many characteristics of certain earlier works have persisted in their specialized descendants; even a brief survey may call attention to some of the inheritances. As most direct influence has come from England, Germany, and France, beginnings in these alone will be briefly noted.

The first important periodical which showed a general educational purpose was the "Tatler" (1709-1711), followed by the "Spectator" (1711-12), and later in England by a host of works of varying degrees of excellence, but usually lacking in the strong qualities of Steele and Addison. In rather direct imitation of the early English periodicals of this class, similar publications (*Moralische Wochenschriften*) began to appear in Germany in 1713,¹ and one writer has listed more than 500 published among German-speaking peoples before the nineteenth century was well begun. Frequently these were conducted by associations of men devoted to literary and social betterment; they were exceedingly important in the intellectual progress of middle-class Germany. Many of them made use of catechetical and other didactic forms of discourse, letters, poetry, and highly moralized stories.

Eighteenth century education in England or in Germany offered many "easy marks" for satirical shafts, and many of the earlier references to schools, teachers, and teaching practices were such as keen writers might produce when looking about for a social abuse or personal idiosyncrasy to ridicule. But from the first there were occasional serious criticisms upon education, like the following from Steele:²

I must confess I have very often with much sorrow bewailed the misfortune of the children of Great Britain, when I consider the ignorance and undiscerning of the generality of schoolmasters. The boasted liberty we talk of is but a mean reward for the long servitude, the many heartaches and terrors, to which our childhood is exposed in going through a grammar school; many of these stupid tyrants exercise their cruelty without any manner of distinction of the capacities of children, or the intention of parents in their behalf. There are many excel-

¹ Lehmann: 7-78.

² Spectator, No. 157. Steele, G. A. Aitken, London, 1898, Vol. II. 361.

lent tempers which are worthy to be nourished and cultivated with all possible diligence and care, that were never designed to be acquainted with Aristotle, Tully, or Virgil; and there are as many who have capacities for understanding every word these great persons have writ, and yet were not born to have any relish of their writings.

Descriptions of the human body, giving attention to the bent of nature, milder discipline, better female education, better moral instruction, and the desirability of turning instruction into play whenever possible were topics discussed in the first half of the century.¹ The moral instability of teachers is a constant topic; teachers are blamed for trying to teach what is beyond the comprehension of children and of requiring too much memorizing; poor teaching and discipline are illustrated and condemned, and Quintilian quoted to show a better way, and toward the close of the century there are divers model plans for improving education.

Gradually some of these periodicals assumed greater pedagogical content, and many were devoted almost entirely to education. Lehmann mentions the following, of which the names indicate more or less closely the purpose:²

Der Getreue Hofmeister (Loyal Tutor).....	1725
Sorgfältige Vormund (The Zealous Tutor, or Guardian).....	1725
Neue Mentor.....	1725
Der Hofmeister (The Tutor).....	1753
Der Kinderfreund (Friend of Childhood).....	1776
Der Dorfschulmeister (The Village Schoolmaster).....	1776
Der Philanthrop.....	1777

Twelve others are named ending with "Die Volksschule," 1800. Some of those in his list existed and were fairly widely known during the first 20 years of the nineteenth century. Such were Salzmann's "Der Bote von Thueringen," 1788-1816; "Deutsche Schulfreund," under various names, 1791-1823. Four others of sufficient strength to issue 10 years or more were established before 1820, the last being the "Allgemeine Schulzeitung," which under varying titles was published until 1881.

In both France and England, as well as in Germany, the output of periodicals for children was considerable. The first French periodical devoted entirely to education or the needs of children was the "Journal de Famille ou Livre des Enfants," established by Seguin in 1789.³ A more specifically educational work was the "Journal d'Education publie par la Societe forme a Paris pour l'Amelioration de l'Enseignement Elementaire," published in Paris, 1815. In England "The Children's Magazine or Monthly Repository of Instruction and Delight" (London, 1799) is mentioned as the first which could be called a school or pedagogical journal. In 1800 appeared "The Monthly Preceptor, or the Juvenile Library, including a complete course of instruction in every useful subject, particularly natural and experimental philosophy, natural history, botany, ancient and modern history, biography, geography, and the manners and customs of nations, ancient and modern language, English law, penmanship, mathematics, and the belles lettres." This encyclopedic curriculum, coupled with prize essays for which considerable rewards were given, was to form the content of about 60 numbers. This was a school journal but not a school teachers' journal, as it circulated among the upper-class pupils of English schools. Other periodicals devoted to education were "The Guardian of Education" (London, 1802-1806), by Mrs. Trimmer, devoted to sectarian as well as educational ends; the "Assistant of Education" (1823-1828), and the "National School Magazine"

¹ Lehmann: 20-29.

² Loos' Paedagogische Zeitschriften. Lehmann. 78.

³ Amer. Jl. of Ed., 1827, 11, 666.

⁴ Russell: Ed. Rev., XXII, 472.

(1824), both designed for pupils rather than for teachers. No real educational journal was successfully established in England until 1831, when the London Quarterly Journal of Education was issued by the Society for the Diffusion of Useful Knowledge.

This rapid survey of the beginnings of educational journalism in the European countries makes it possible to state that, if we accept the "Academician" (1818) as the first educational periodical in America, its European precedents, if its editors were conscious of any, must have been German or French. The same statement may be made of the "American Journal of Education" (1828-),¹ and in its early volumes are extensive quotations from both German and French journals. Though it may not be possible to cite, as in the case of Silliman's "American Journal of Science,"² a specific quotation to show that the founders of either of these publications were consciously imitating foreign precedents, it seems reasonably evident that they were a part of Pestalozzian German influence.³ Examination of early volumes of "The Port Folio" (1801-) or the "North American Review" (1815-) shows that even apart from such information as came through German settlements and colonies, the reading public of the United States was not entirely ignorant of German institutions. The works of Maclure, Neef, Griscom, Ticknor, Bache, Cousin, and Stowe, gave much greater familiarity with German school practices; the editor of the "American Annals" had spent several years in Europe; and of the periodicals established between 1830 and 1840, German, and some times French, precedents are definitely cited. Thus the Illinois Common School Advocate,⁴ 1837, states: "A weekly and monthly paper are sent to all the schools in Prussia and France at public expense." "The Educator,"⁵ of Pennsylvania, proposed to use translations and quotations from the "fifteen or twenty school journals" then issued in Germany.

If an endeavor be made to find in antecedent English or American periodicals of the first quarter of the nineteenth century an increased attention to educational matters which might be expected to lead toward the educational journal type, the process of development in Germany, there is little in the content of important publications to indicate such a transition.

In the first eight volumes of the Edinburgh Review (1802-1807) schools and education are given no attention; in volume 9, there is a review of Mrs. Trimmer's treatise on Lancaster's plan of education; in volume 11 a review of Lancaster's "Improvements in Education," and in the succeeding volumes are numerous articles upon education and philanthropy. But in the first 45 volumes, 1802-1826, only 375 pages are occupied with education, or less than one-fiftieth of the space. Nor do the three more important American periodicals of the same period show greater interest in schools or education. "The Port Folio," Philadelphia (1801-), contains about four columns upon education and the work of the free school society in volume 3; a little later a book review of "Nature Displayed in Her Mode of Teaching Language to Man," adapted from the French; in the fifth volume (1808) is a long series on classical learning, and after 1816 each volume contains some material upon schools or education. The North American Review from 1815-1826 has articles treating of the education of the deaf and dumb, English and German universities, the Connecticut school fund, free schools; quotes German writers on the value of classical education, and school reports from various States, but devotes not more

¹ Vol. II, 666.

² Amer. J. of Science, 1818, I, 1.

³ Monroe: Pestalozzian Influences in the United States, discusses several of these.

⁴ Common Sch. Advocate, 3.

⁵ Educator, 1838, p. 1.

than 2 per cent of its space to education. Silliman's *American Journal of Science*, in the nine volumes, 1818-1825, has occasional articles upon monitorial instruction, the work of Fellenberg and Owen, and notes of educational progress. The *Boston Recorder* (1816-1823) and others of semireligious nature give a limited amount of space to education, along with philanthropy, temperance reform, and missions. Examination of newspapers until well after the War of 1812 shows their interests to be almost exclusively general news, politics, and war.

But though American educational periodicals did not grow from other publications by successive modifications, they did come into being to some extent at least as an imitation in the field of education of what had already been done in other provinces; it is easy to find evidence that in establishing the early school journals editors and publishers were consciously attempting to parallel similar publications in literature, art, science, and medicine. If these fields had their organs, why should education be without? Note the reasoning in the following prospectus of an "*Academical Herald and Journal of Education*," projected in 1812, though never published:¹

A friend to learning, which is the best safeguard of the rights of man and a terror to despotism in any shape, I propose to attempt the survey of a region which has been much and promiscuously trodden, but of which no accurate map has been drawn, a country known in part to many, but to none wholly. This enterprise has either never been suggested to the pioneers of literature and science, or they have shrunk from it as from a labor that would waste their strength without the hope of reward; without even *that hope* which has promised so much and performed so little for literary adventurers. It seems strange that almost every art, science, and profession has its peculiar vehicle of information, while the science of education is without its advocate. Law, medicine, and divinity, commerce, agriculture, and even the fashions and follies of the age have their "journals," while the art of improving the human mind, the source whence all the others derive their consequence, is abandoned to chance or neglect. Unless the intellectual powers are well cultivated, we can not expect great success in any literary profession. First render the waters of the fountain pure, and then with ease the vivifying streams which flow from it may be led through all the walks and departments of literature and science. The establishment of an educational journal in which proper plans and modes for the treatment and instruction of children may be proposed and elucidated is perceived at once to be as necessary as it is useful.

The editor of the *American Journal of Education* uses a similar eulogy:²

A periodical work devoted exclusively to education would seem likely to be of peculiar service at the present day, when an interest in this subject is so deeply and extensively felt. At no period have opportunity and disposition for the extensive interchange and diffusion of thought been so favorably combined. Science and literature have their respective publications, issuing at regular intervals from the press, and contributing incalculably to the dissemination of knowledge and of taste. But education—a subject of the highest practical importance to every school, every family, and every individual in the community—remains unprovided with one of these popular and useful vehicles of information. A minute detail of the advantages which may be expected to result from a periodical work such as is now proposed, we think unnecessary. With the success of other publications of the same class before us, we feel abundant encouragement to proceed in our undertaking.

Reasonable inferences from what precedes are that educational periodicals in the United States came into being as part of the educational revival, their precedents being European, especially German, and that they were undertaken because the growing importance of education was not receiving corresponding recognition in the columns of other publications. It appeared to those who established the earliest of these specialized ventures that if less important fields

¹ *Academician*, 1819-191-.

² 1826, I, 1-7.

sustained organs devoted to their interests, education was also entitled to its own periodical. A description of some of the earliest of these will now be given.

The first important attempt in educational journalism in the United States was the "Academician," published semimonthly in New York (1818-1820) by Albert and John W. Pickett, president and secretary, respectively, of the Incorporated Society of New York Teachers, "containing the elements of scholastic science and the outlines of philosophic education predicated upon the analysis of the human mind and exhibiting the improved methods of instruction." The Picketts were proprietors of a school in New York City and the authors of textbooks; to both of these interests some space is given in their magazine. A wide range of educational subjects received attention in this volume. A fifth of the content is formed by a long series upon grammar and the English language, and there are long discussions of arithmetic and geography. Education in various States, monitorial schools, textbook reviews, and the qualifications of teachers were important subjects. An article by Le Clerc on the education of the deaf is quoted from the *North American Review*, and about one-seventh of the volume is taken from an educational treatise by Dr. Jardine, of the University of Glasgow. Twenty pages are devoted to the work of Pestalozzi. A mathematical department was maintained, a precedent followed by the majority of school journals established before 1875, and a statement that "the volume is nearly concluded and many persons have not yet remitted dues" is the first of a long line of such announcements.

The second educational periodical in the United States was the *American Journal of Education* (1826), continued in the *American Annals of Education*. As this is more fully described in a subsequent chapter, the present treatment will be limited to two quotations, one of them contemporary. Of its origin Dr. Barnard says:¹

On the 1st of January, 1826, the first number of the *American Journal of Education*, the first periodical devoted to the subject which had appeared in the English language, was commenced. * * * The following extract of the origin of this journal is taken from a letter of William Russell, Esq.: "The *Journal of Education* had its origin in the mind of the late Thomas B. Wait, of Boston, whose attention had been particularly attracted to the subject of education during his residence in Portland, Me., at the time when the first movements were there made for the introduction of a public system of primary schools. Mr. Wait had retired from business, but on the return of one of his sons from the West, on whom he could devolve the active duties of publishing, he applied to Mr. John Frost, now of Philadelphia, to edit the intended periodical. Mr. Frost, however, was suddenly attacked with a pulmonary disease, which compelled him to resort to the West Indies for relief, and Mr. Wait made application to the late Dr. Coffin, of Boston, then engaged in editing the *Boston Medical Journal*. Dr. Coffin referred Mr. Wait to myself, and to this circumstance was owing my subsequent connection with the journal as its editor for nearly three years. Early in the second year of that period Mr. Wait, finding the business connected with publishing a periodical too burdensome, disposed of it to Mr. S. G. Goodrich, whose attention ere long was attracted to more profitable branches of the business of publishing."

The esteem in which it was held is indicated in the following quotation, which is one of a number of notices given it by American and English publications:²

When this monthly publication was proposed, there were not a few, we believe, who considered the subject of education too specific and too limited to afford material for a journal of large size and long duration. But if their own reflections have not convinced them of their error, an examination of this valuable work will satisfy them that the subject affords materials of great variety

¹ Barnard: *Normal Schools and Other Institutions and Agencies Designed for the Professional Education of Teachers*, Part I, 194.

² *N. Amer. Rev.*, 1826, XXIII, 214-216.

and of deep interest to the community. Whatever tends to form a sound mind in a sound body, or, in other words, to rear the most perfect moral, intellectual, and physical man, is within the compass of its inquiries. The subject of education was not indeed overlooked in our reputable journals which previously existed; but there is a vast deal of information concerning it which could not be embodied in any one, if in all of them; and our only surprise is that a work was not earlier projected on a similar plan to that of the one before us.

The *Teacher's Guide and Parents' Assistant* (1826) was conducted upon a humbler plane than the *American Journal of Education*. It gave much attention to books for children and to the problems of parents. The work of Pestalozzi was chiefly represented in a description of the method of his follower Neef. An interesting feature of this publication is the great number of short articles upon educational subjects quoted from local newspapers. The following statement from the *American Journal of Education*¹ indicates that there was much of such material available:

We are happy to observe that among the many newspapers which are published daily or weekly, in various parts of the country, the subject of education is frequently brought forward, and that useful suggestions are often made for improvement in schools and in domestic instruction. This is a circumstance which must greatly aid the progress of the public mind on this important subject, so intimately connected with the welfare of the community.

The editor then names several papers especially active in this field, but quotes few, if any, of the articles. The selections in the *Teacher's Guide* make possible a very good estimate of what most of such articles were like.

The *Education Reporter* and *Weekly Lyceum* (1830) quoted much from newspapers and from the *Annals*. Its content includes practically every phase of education, besides departments of art and science, current events, the lyceum, and a series of articles upon "How to get the child to attend Sunday school." About one-fourth of this journal's space consists of educational news items.

The *Monthly Journal of Education* (1835), whose title was changed at the request of the editor of the *Annals* to avoid confusion with the earlier name of that periodical, and appeared successively as the *Monthly Advocate of Education*, and the *School Master and Advocate of Education*, secured most of its content from *Cousins' Report* and the *London Quarterly Journal of Education*. It contained also a children's department and several quotations from *Dick's Mental Illumination*.

The *Common School Assistant* (1836) also includes parts of *Cousins' reports*; it specialized to some extent in method and device, and in its second volume gives great prominence to the county educational notes which continued to be so important in most of the New York State school journals.

The *Common school Advocate* and *Journal of Education*, Illinois (1837), the first school journal in the Mississippi Valley to issue more than one or two numbers, contains *Stowe's Report* applied to Illinois conditions;² extracts from State laws and reports, and many articles quoted from the *Common School Assistant*. It asks for contributions upon "Teaching Made a Profession;" best methods of teaching the common-school subjects, qualifications of teachers, school architecture, school libraries, the importance of universal education, and the connection between ignorance and crime.

The *Western Academician* (1837) was conducted by the same editors as the first *Academician*, and shows many of its characteristics, though it contained *Stowe's Report* in full and many long articles by ministers who were members of the *Western Literary Institute*, of which this journal was the organ.

¹ 1826, I, 379.

² *Common Sch. Adv.*, I, 3.

The foregoing indicates the character of the earliest educational periodicals in this country. Their most important common characteristics were the presence of much Pestalozzian material, and the large number of articles of a general nature discussing the importance of education and the necessity of free schools in a republic.

Of the 20 or more educational periodicals established before 1840, many refer to such journals issued in Germany. Cousins' Report, which was printed in part by nearly all of these, mentions the fact that various publications were sent by the Prussian Government to its teachers. German precedents, imitation of older communities in the United States, and the fact that other interests had their specialized organs, were all influential in establishing these pioneer periodicals. At the close of 1840, however, only three were in existence, the Connecticut Common School Journal, discontinued about a year later; Horace Mann's Common School Journal, and the District School Journal of New York, both recently started upon careers of several years. A subsequent chapter will discuss the agencies which continued to bring school periodicals into existence.

Chapter II.

THE FUNCTION OF EDUCATIONAL PERIODICALS.

What has been the function of school journals? What have they accomplished and what have they sought to attain? To what groups of readers have they appealed? These are questions which can be answered in part by examining their own self-stated aims; in part by a study of their success as measured by longevity and circulation; and in part by the character of their content. The first means only will be used here, leaving the others for later chapters.

In the prospectus of a proposed "Academical Herald and Journal," written in 1812 by Samuel Bacon,¹ and "devoted to the institutions of the United States," the purpose is stated to be to make inquiry into the organization and present condition of our universities, colleges, academies, public libraries, and other literary and scientific institutions. General diffusion of knowledge is the only foundation of liberty and morals. "Education well-conducted is the glory of a nation. It is here, it is in this, that are centered all our national hopes. Everything depends on what is now going on in our *nurseries and schools*. Within them are those who half a century hence will hold the destinies of this nation."

In setting forth its purpose the *Academician* (1818) quotes with approval Dr. Jardine, who says there has been too much emphasis upon mere memory. The *Academician* is to contain material upon the state of education in our country; methods most approved in arithmetic and algebra, geometry and trigonometry.

Viewing the diffusion of knowledge and a rightly cultivated mind as the foundation on which must rest the perpetuity of our republican institutions and the best interests of society, they conclude by assuring the public that they shall exert themselves in so important a cause.

In the next pages quotations from several periodicals issued prior to 1860 will be given:

The spirit of inquiry which has of late years extended to everything connected with human improvement has been directed with peculiar earnestness to the subject of education.² In our own country, the basis of whose institutions is felt to be intelligence and virtue, this topic has been regarded as one of no ordinary interest, and has excited a zeal and an activity worthy of its importance. By judicious endeavors to adapt the character of instruction to the progressive requirements of the public mind, much has been done to continue and accelerate the career of improvement. These very efforts, however, and this success have produced the conviction that much remains to be done. * * *

A leading object of the Journal will be to furnish a record of *facts*, embracing whatever information the most diligent inquiry can procure, regarding the past and present state of education in the United States and in foreign countries. An opportunity will thus be afforded for a fair comparison of the merits of various systems of instruction. The results of actual experiment will be presented, and the causes of failure, as well as of success, may thus be satisfactorily traced and be made to suggest valuable improvement.

The conductors of the Journal will make it their constant endeavor to aid in diffusing *enlarged and liberal views of education*. Nothing, it seems to us,

¹ *Academician*, I, 191.

² *Am. Jl. of Ed.*, I, Jan., 1826, 1-7, prospectus.

has had more influence in retarding the progress of improvement in the science of instruction than narrow and partial views of what education should be expected to produce. Intellectual attainments have been too exclusively the object of attention. * * * The Journal will give attention to physical, moral, domestic, and personal education, * * * will advocate and aid female education, * * * will be devoted chiefly to early or elementary education, without omitting higher education.

The office of the Journal is—not to rouse a dormant attention. Already there is everywhere a stirring of the public mind and a fervency of public effort which make it too late for any candidate to hope for the honor of being ranked as a reformer. All that can now be reasonably expected is the satisfaction of contributing a proportion of service to so good a cause.

Specific matters to which the journal proposes to give attention are books and amusements for children even in the nursery, infant schools, mechanic institutions, book societies, and lending libraries, and information as to the national university project. And finally¹—

One word with regard to the class of readers for which our publication is intended. We have no intention of furnishing a work for the use of teachers exclusively. We consider the most important department of education to be that which is, or ought to be, superintended by the parent; and we shall ever bear in mind that our subject is one to which no person should be indifferent. Our wish is to benefit the *whole community*.

Less fully, but including a wide field, the Education Reporter and Weekly Lyceum² (1830) states that:

Its purpose is to promote *popular or general education* in the most familiar, direct, and practical manner. It will take the whole range of that very extensive field—mode of instruction, government, and discipline; qualifications of teachers; character of books and apparatus; construction of schoolrooms and playgrounds; will treat of public and private schools, academies and high schools of every grade, infant schools, the monitorial system, manual labor, seminaries, the lyceum, Sabbath schools, and Bible classes.

The Eclectic Institute Journal of Education (1832) as quoted by the American Annals:³

The object of this miniature journal is to assist in executing the purposes for which the Eclectic Institute was founded, viz, to aid in the *diffusion* of improved education. In the absence of interest sufficient to induce the patronage of eastern periodicals devoted to education, the publication of this paper is undertaken as an experiment with the hope that something may be done to awaken the attention of our community to the frightful disproportion that exists between the want and amount of education; to secure intelligent legislation upon the subject of common schools, founded upon a knowledge of the ripe experience of sister States; to diffuse correct conceptions of the ends and means of education; and to stimulate our fellow laborers in the business of instruction to higher efforts for self-improvement, and the improvement of their noble profession.

It is particularly desired by us that our efforts may be useful to common schools; which, as they must under any circumstances, afford nine-tenths of the education of the country, we can not but regard as of incomparably more importance and more deserving of encouragement by legislation, or otherwise, than all the colleges in the land.

The Monthly Journal of Education⁴ (Princeton, Philadelphia):

In the most general language, our object is to promote * * * the cause of good morals and sound education. In a labor of this kind the first requisite is to disseminate correct information on the subject; to pour light into the minds of the people in reference to what has been accomplished and what is in the course of accomplishment in different parts of the world toward purifying the sources of human conduct and elevating man to his true rank and dignity by giving him such an education as will fit him for the adequate discharge of his appropriate duties. * * * Closely connected with this object is that of awakening a

¹ Am. Jl. of Ed., I, Jan., 1826, 1-7, prospectus.

² I, 1.

³ Am. Annals, 1832, II, 301.

⁴ I, 1-4, 1835.

general interest in the public mind on the subject of education. There is at present, at least in this section of the United States, a widespread and melancholy indifference in reference to it * * * In part due to the doctrine borrowed from the commercial code * * * that education, like tea and silk, should be left to the operation of the principle of demand and supply.

Another purpose is: To elevate the standard of primary schools which do little but reading, writing, spelling, arithmetic, geography, and grammar in nineteen-twentieths, or maybe ninety-nine hundredths of the schools, and even these are often pursued to so limited an extent as to be almost entirely useless.

The same periodical, reorganized as the *Monthly Advocate of Education*, restates its purpose: ' That it (education) is, however, the sheet anchor of our political hopes as a Nation, the only safeguard of our civil institutions, every day's observation serves more fully to convince us; and that it is the great lever to be employed, under Providence, for the political and moral regeneration of the world, we entertain as little doubt. It is, therefore, an object of prime and indispensable concernment to us as citizens, as philanthropists, and as Christians.

Although the value of education is very generally *acknowledged* by our people, yet we fear we can not add with truth that it is as deeply *felt* by the great body of them. Apathy * * * a painful topic, which blinking will not cure. * * * We must have the firmness to probe the sore to the core, and then, with what skill we may, to restore health and soundness to the diseased and suffering system. To lend a helping hand, feeble though it be, to this great and good cause is our main object in the work which we propose to establish. * * * Teachers' seminaries a main object to be worked for.

Common School Assistant: ' The improvement of common schools is the exclusive object of this paper. From statistical fables it can be seen that only 1 pupil in 20 goes higher than the common school. This paper, therefore, will endeavor to assist 19 out of 20 of the children and youth * * * in acquiring the only education they will ever receive. * * * Public sentiment must be enlightened.

Common School Advocate² (Illinois, 1837): The leading object of our proposed publication will be the promotion of common schools. By this, however, we would not be understood as *undervaluing* the higher grades of education. * * * But our chief attention will be devoted to common schools. And the design of the Advocate will be to move the public mind and make an effort in this all-important cause by the presentation of facts, examination of books, methods of teaching, existing systems of education in our country and the world. * * * The primary object is to break up inaction due to lack of information or absorption with other topics—not to overcome opposition to education, which does not exist.

The Western Academician⁴ (1837): It will be seen that the objects are, to aid in giving tone and character to the public mind, to create a taste for scientific attainments, to build up a strong rampart about our country by the introduction of a manly and vigorous education diffused among the people that thus they may know to estimate national liberty, as well as to preserve it.

Connecticut Common School Journal⁵ (1838): The purpose is to promote the elevated character of common schools, * * * be the organ of communication between the board and secretary and the people, contain laws of the State * * * help school committees and visitors * * * help form, encourage, bring forward good teachers * * * and furnish some matter adapted to the capacity of children * * * and give information as to what is being done in other States.

District School Journal⁶ (New York, 1841): We are now suffering from the evils attendant upon a negligent education. We have been engrossed by the material interests of society. * * * The public eye has been coldly averted from the schools. Hence, we fear, is much of the increasing demoralization of society; hence that leaden apathy which weighs down these mainsprings of the social system, clogging all movement and checking all progress. We do

¹ Vol. 1, 137-138.

² Common Sch. Asst., 1836, I, 1.

³ Common Sch. Adv., Vol. 1, 1.

⁴ Vol. I, 4.

⁵ Vol. I, 5, 1838.

⁶ Vol. II, 4.

not realize the relation between school and life. * * * And, therefore, though the fund is ample and well contrived, yet our schools are embarrassed and degraded and will remain so until an enlightened and honest interest is taken in their welfare. The Journal hopes to help in remedying the evil.

Common School Journal¹ (Pennsylvania, 1844): It will, therefore, be our aim, first of all, to collect and diffuse information in regard to the past history and the present actual condition of the public schools throughout the State. It is obvious that a correct knowledge of these points must lie at the basis of all intelligent action for their future improvement. * * * Next to the collection and diffusion of information of intelligence in regard to the state of public instruction, we would esteem it especially important to enlist the attention of directors, teachers, and others engaged in the cause to the suggestion and discussion of improvement.

Ohio School Journal² (1846): (1) To awaken the whole community to a lively sense of the importance of education to a free people,³ and of the common school as the means by which all the youth of the State are to be educated. (2) To arouse school directors and other officers to a high sense of the responsibility of their stations, and to aid them in performing their duty to the schools, the community, and the State. (3) To aid teachers in the important work of self-culture in preparing for the duties of the schoolroom and in becoming efficient laborers in promoting general education.

Maine Journal of Education⁴ (1850): To be the organ of the board and of teachers in order to give greater uniformity and efficiency. Will also be a medium for disseminating among the masses correct views in regard to physical, intellectual, and moral culture of the forthcoming generation and the best means to be employed.

American Educational and Western School Journal⁵ (Ohio, 1852): Design is to be educational but not merely so. * * * Means that it shall be a guest, ever to be greeted with undissembled welcome at the domestic fireside, attracting by its genial message the attention of both old and young.

District School Journal⁶ (Iowa, 1853), to be devoted exclusively to the interests of the district schools of the State: By so doing we shall endeavor to elevate the standard of common-school instruction, to diffuse as widely as possible useful knowledge, and to render the communication of that knowledge to the young as free and unfettered as the air they breathe. We shall advocate the establishment of a school system upon a broad, comprehensive, and impregnable basis, so that the blessings of a sound elementary education can be assured to every child of the State without distinction or discrimination.

Michigan Journal of Education⁷ (1854): But what is the object of this new periodical? Not * * * even to procure a livelihood for editors and publishers, for we get our living by other means, and this is a labor of love, * * * but our object is to promote the correct and thorough and general education of the sons and daughters of the State of Michigan.

The **Missouri Journal of Education**⁸ states it purposes to arouse public feeling, urge better schoolhouses, better qualified teachers, and better salaries and longer terms of school, and explain best method of instruction and discipline, and to be literary as well as educational.

A year later the **Missouri Educator**,⁹ after deploring the absence of any literary and educational journal, announces its purpose to be the inspiration of the people, and the inspiration of greater zeal for their work among teachers, as well as the giving of information and suggestions.

The **Voice of Iowa**¹ (1857): We have no appeal to make to parties or sects, but one universal invitation in the name of humanity, in behalf of the race, to

¹ Vol. I, 2.

² Vol. I, 1.

³ Vol. I, 4.

⁴ Vol. 1, 45.

⁵ Missouri JI. of Ed., St. Louis, I, 3-4, 1857.

⁶ Missouri Educator, Jefferson City, I, 1, 1858.

all who love progress in science and the arts, the lovers of the beautiful, the true, and the useful; we extend to all, by whatever altars they may worship, or around whatever captain they may gather, a hearty invitation to join our troop. * * * As a pioneer we come, claiming a difference from all that has preceded us. Although we may sometimes give *selected* gems, our main object will be to make true our name—to let Iowa be known as she is to all who trace the pages of our work. [The purpose will be] to bring within sight of all the glorious inheritance of the means for free instruction in all the necessary branches of science.

Alabama Educational Journal¹ (1858): The object of this journal is to record the educational movements going on among us and about us, both for the sake of diffusing information in respect of them and that they may be preserved as matters of future history.

Young teachers may profit by knowing what older teachers have done, educational literature will be disseminated and the public informed. Teachers, parents, and citizens are appealed to for support.

The foregoing somewhat extended quotations may be taken as fully representative of the aims of school journals during the pioneer period, which, it should be noted, varied chronologically with the development of the public school system. Similar statements of aim could easily be found in the reconstruction period of the South and the development of the newer Western States. In this era appeal is to parents, school officers, the community at large, as well as to teachers. The official State journals, sent as a rule to school officers, frequently aimed to be literary as well as educational, and not "mere school journals," a term applied very early and attached to every periodical which gave conspicuous attention to schoolroom procedure.

The aims cited show an unbounded faith in education as the means of transforming society, and an oft-expressed belief that general diffusion of knowledge is the foundation of liberty and republican institutions. To promote this diffusion of knowledge through a public school system which was beginning to take form; to awaken a more general interest in education, to disseminate more liberal views, to guide or enlighten public sentiment and enthusiasm for education, and to secure intelligent legislation, were among the purposes to be striven for. Inquiry as to the state of public education in all the world, past and present, was frequently mentioned as prerequisite for wise procedure. Among specific measures advocated were the establishment of monitorial schools, manual labor institutions, infant schools, libraries, lyceums, normal schools, a national university, better education for women, and most prominently of all the establishment upon a sound basis of *free* public schools. As will be shown in the chapter upon content, many of the leading articles were very general in nature; comparatively few had direct relation to schoolroom procedure; the great aim was promotion and direction of a public school system in the process of becoming. Even the names of many of these periodicals proclaim their mission as that of agitation. Fifteen of the eighteen "Advocates" which have lived their short span had flourished and passed away before 1850; other suggestive names were the Academic Pioneer, Universal Educator, Educational Disseminator, and Free School Clarion.

Until about 1870 the general aims previously cited seemed to satisfy, though there is occasional recognition of a field not well occupied, that of supplying material for the rank and file of those who were actually doing the teaching. Such general aims appealed to the few; the many were not so much concerned with the larger phases of educational thought as with what was of direct or immediate utility in the schoolroom. Such content in the nature of the case

¹ Vol. I, 1.

must appear to be on a lower plane, especially if it is presented so as to appeal to young, inexperienced, poorly educated, or ill-trained teachers. There is accordingly much unwillingness to declare frankly that the purpose, or a leading purpose, of a school journal is to publish method and device, and much disagreement as to what the purpose of a school journal should be. In the transition from the general to the specific character, or, as often expressed, from the liberal and cultural to the direct and trivial, many uncomplimentary remarks were made, even denying such school periodicals as circulate generally any justification for their existence. Some of the most radical criticisms are from the editors themselves. Careful reading of the following quotations, which state more or less analytically the difficulty of determining the school journal's function, and of finding content appropriate for its purpose, will show that one of the unsolvable problems attempted was that of trying to interest relatively uneducated teachers in matters beyond their mental horizon; for those who were unwilling or unable to cheapen content by coming to the lower level, it was very natural to find fault with the tendency which did both.

The earliest recognition of the dual function which school journals might be called upon to serve is from the *Education Reporter* and *Weekly Lyceum*² (1890):

"The proposed field is almost unoccupied," except for the *Journal of Education*, which will devote itself more to heavy articles.

The *Journal* will still be desirable for the scholar and the educated man of leisure; the *Reporter* will attempt to aid every teacher, however humble his location, and assist every parent in training up his precious charge. Our highest ambition will be gratified if we can fill this humble department acceptably and usefully.

The opposite ideal appears in the *Connecticut Common School Journal*³ (1838):

It has been my aim in this publication to embrace only documents and articles of permanent value and interest. This necessarily interferes with its popularity, success, and makes it a constant expense. (Barnard.)

The following extracts relate more specifically to the problem:⁴

What is to be expected of a teachers' journal? Some object that it contains no material for the district schools, almost entirely for grade and high schools. Many take a teachers' journal expecting in it and by it to be told how to teach school under any and all circumstances; how they shall keep order, how they shall teach reading, spelling, etc.; in other words, they expect a set of empirical recipes, and if they do not find them, as they can not, they drop the journal as of no use to them. It must be understood that it is impossible to give detailed methods in teaching that are infallible. Teaching has not yet reached the crystalline stage of a true science, when it can be limited and defined, its processes explained, and its results predicted with certainty.

*American Education Monthly*⁵ (1869): The poverty of our educational literature is indeed a matter of national reproach, especially to a nation that professes to be doing so much and so well for education. The better class of teachers * * * hold themselves aloof from educational papers. Thus * * * they exert no considerable influence on the character of educational literature.

Boys and girls teaching are neither producers nor consumers of educational literature. The editor classifies other teachers as those who lead, "leading educators"; those who are led; and those who neither lead nor go. The second group furnishes most market for school papers, and this class craves material of the county institute essay type or of the comic almanac style; principles they can not stand.

² Vol. I, 1.

³ Vol. I, 5.

⁴ *Illinois Teacher*, 1869, XVI, 81.

⁵ Vol. VI, 116-121.

The Teacher¹ (1889) : Our highly esteemed and very valuable contemporary, the Journal of Pedagogy, Athens, Ohio, some time ago called attention in its editorial columns to the worthlessness of a large number of our American educational journals. We have long been impressed with this fact, and are also "sorry to be compelled to say that their average tone is decidedly low." The number of these journals is annually increasing, in spite of the fact that the greater part of them meet an early and richly deserved death. We are puzzled to know what is the reason for their existence. Do teachers demand that sort of chaff? or is it that their editors are under the misapprehension that teachers are altogether devoid of literary taste—or, worse still, of common sense? These educational journalists are mostly under the impression that the sort of inspiration and practical help (?) needed by teachers is scrappy information of all kinds and a vast amount of questions and answers and exceedingly interesting items about very unimportant persons and things. * * * We can not very well know where to lay the blame, but we do know and feel that a crusade against such literature and such deteriorating influences is very much needed. We are sorry for the editors and publishers who are constrained, if they are so, to meet such a demand. We are just as grieved for the teachers who waste their time on such reading, and more so for those who are in need of influence and have to come to such a source for their education. A description of these journals is hardly necessary. * * * They are fine specimens of enterprising journalism, with a very small capital of education or the culture inseparable from it. Under the circumstances it is a problem why they exist, and when they cease their existence the profession will be blessed.

Quoted by Public School Journal² (IX, 408) : Our American educational journals are not, in the main, such as we could be proud of. They are to-day, for the most part, crude, shallow, uncritical, carelessly edited, full of poor flatteries, lacking in dignity, and lacking in definite aim. Perhaps no other field of journalism has been cultivated in so unsatisfactory a manner, whereas no field really demands more critical and scientific workers; for the educational journal is the teacher of teachers.

Samuel Findley, on educational journalism in Ohio :³ A problem ever present to the honest editor of a periodical devoted to the interests of common schools is how to fill his pages with matter most instructive, elevating, and inspiring, and best calculated to promote wise and sound education, and yet at the same time so popularize his journal as to secure a sustaining constituency. The problem is not an easy one, but is likely to grow easier with the increase of intelligence and the dissemination of broader and juster views of education among teachers.

[The writer (Sabin)⁴] believes that the custom of filling a school journal with methods and devices, cut and dried, all ready for school use, is not calculated to make strong, independent teachers. It savors too much of the labor-saving device of living in a flat and having meals sent in from a common kitchen. The power to think, to originate, to adapt to the present work of the school, is the surest criterion of a good teacher; but this power is not acquired by wearing the misfit garments of some other person, nor by fighting the battles of David in the armor of Saul.

The Journal⁵ will continue to address teachers as rational beings who are intelligent and are seeking to improve their knowledge of the theory and practice of teaching. It positively refuses to consider the education of a child as a mechanical process, to be carried on by mechanical device and rule of thumb.

Ohio Educational Monthly (1901, 358) : Among the subscribers to educational journals are found the two extremes, composed on the one hand of those whose demand for what they term practical is so strong that they fail to see anything of merit in an article which can not be used directly to aid them in the actual work of the classroom, and, on the other hand, of those who have lost all sympathy with the helps which are so valuable to inexperienced teachers and which they themselves at one time needed, and who as a result criticize every article which does not treat in a philosophical manner some underlying principle of education. * * *

¹ Vol. II, 82.

² New England Mag., 1891, IV, 134.

³ Ohio Ed. Mo., 1892, XLII, 344.

⁴ Iowa Sch. JI., Des Moines, 1892, VII, 7.

⁵ Pub. Sch. JI., Bloomington, 1893, XIII, 37.

The young teacher who wants to grow in his work realizes that he must feed his mind upon something outside of and beyond the mere daily grind, important as that is, by which he must prepare himself for his daily work. He welcomes topics which do not have any direct bearing upon his daily work, which may not be practical in the narrow sense of being immediately and directly usable, but which do give him something outside of his schoolroom and beyond himself to think about and reflect upon.

The plan of conducting the *Practical Teacher*¹ is a very simple one. It consists of an attempt to teach and in some degree supervise the teaching of those who may need my help in their work. I have a very strong desire to assist teachers in their struggles to do better work in the schoolroom, and have accepted the editorship of the *Practical Teacher* that its columns may be made a means of helping those teachers who are beyond the immediate limits of my classes and personal direction. (F. W. Parker.)

The *Western Teacher*² discusses schoolroom method, practical aids, and usable materials for progressive teachers.

The *School Bulletin*³ sets forth its purposes as follows: To give news especially of the institutes of the State; to publish extended sketches of New York teachers and schools, and to discuss in brief articles only current educational measures.

The purpose is to publish a State school paper⁴ of practical value to every teacher—methods, device, schoolroom aids: Our constant aim will be to meet the absolute needs of the schoolroom.

The foregoing are representative. Their main content may be summarized as follows: The better class of teachers holds itself aloof from teachers' periodicals; many of the rest want amusement, jokes, scrappy information, or literary pedagogy of the county institute type. Hence many journals are crude, shallow, and lacking in dignity. The most commonly alleged demand from teachers, however, seems to come from ill-qualified persons who persistently ask for something "practical"—material directly usable in the schoolroom. Teachers apparently wish to read a plan of procedure to-day which may be practiced to-morrow and forgotten the next day, without improving themselves. Several of the quotations protest against ready-made devices and prescriptions for rule of thumb and mechanical methods. It is noted, however, that much which appears trivial to an experienced teacher may have had value at an earlier stage in his career; what is quite obvious and used as a matter of fact by strong, resourceful, or ingenious teachers has to be suggested, even given in ready-made form to a large class of teachers who are neither resourceful nor ingenious. And the last citations recognize method and device as a large element of their aim. A study of circulation statistics in a later chapter shows that the journals which actually made this their aim were the ones which met the most general demand.

Between the ideal of Dr. Barnard, "to embrace only articles of permanent value and interest," and the clever paper, with its hints, plays, songs, exercises to cut and paste; and, on the other hand, the schoolmen's type of journal, with its notes, personals, "puffs," and editorial advertising, there is a wide gulf. The former type, best represented by Barnard's *American Journal of Education*, realized its function most fully in becoming, as projected, a standard encyclopedia of education. It may be consulted in any large library, and is accepted as good authority at home and abroad. It is read only by somewhat scholarly persons now, as was the case while being published. For actual average teachers with only moderate enthusiasm for things intellectual, it was

¹ *Practical Teacher*, Chicago, 1884, VIII, 13.

² *Western Teacher*, Milwaukee, 1892.

³ *Sch. Bulletin*, Syracuse, 1874, I, 4.

⁴ *Nebraska Teacher*, Lincoln, 1898, I, 18.

too scholarly, serious, and impersonal. A careful student of education¹ has alleged that school journals at the close of the century were less powerful than 50 years earlier, since they could no longer influence legislation. With the statement there can be no objection. Any inferences drawn from it should take into consideration the fact that the earlier journals were devised for and read by those who made laws or at least voted for lawmakers, while the most general circulation of school journals at the close of the century was among those who did neither. All might be interested in the construction of a State school system; only professional teachers could be expected to read nature-study lessons or busy-work.

The following is the estimate of a competent student of education concerning school journals of the time (1895):²

After long examination of the several periodicals, we have some time since concluded, and now invariably advise teachers, that for most purposes no educational journal is half so valuable as the ----- School Journal, edited by ----- Our reasons for this opinion are, that it is conducted in an earnest, helpful spirit; that it makes no concessions to the educational demagogues and mountebanks; that it continually sets the mastery of principles above the application of mere devices; and that it never for a moment loses sight of the philosophical and psychological foundations on which all sound educational theory and practice must rest. Its ideals are of the highest and its methods beyond criticism.

With the above high indorsement, which seems to the writer not unreasonable, note the character of the periodical under consideration. The volume of 1895-96, in its less than 600 pages, exclusive of advertising, contains nearly 200 articles, in addition to book notices, poetry, a few jokes, news, and editorial notes, and a long continued story. A fourth of its space is occupied with schoolroom method and management. It is of interest only to teachers, unless the story should prove of interest to older children. Compared with the works of the early period, it would appear to the general reader scrappy and of limited interest. But both the estimate quoted and its circulation indicate that it was performing its mission. The function of a general school periodical had changed.

In this chapter, chiefly by means of the quotations cited, it has been shown that the earlier school journals had widely inclusive aims, the most constant and universal of which were agitation and promotion of wise educational measures by influence upon leaders rather than direct aid of actual teachers through method and device; this aim and the older type of journal, in the presence of demand for "practical" material for teachers, occasioned after 1860 much discussion as to what a school journal was or should attempt. As a class school journals met these demands and questions by the increase of "practical helps" and "school news" material, shown later in the study of content; and it will also be shown that another class of periodicals developed whose sole appeal was to the classroom teacher. The only possible solution of the dual problem was increase of specialization.

¹ Boone: Educ. in the U. S., 152.

² Ed. Rev., New York, 1895, IX, 523.

Chapter III.

SCHOOL JOURNALS SPECIALIZED TO MEET LOCAL NEEDS.

Progressive specialization as a general movement is easily marked in the evolution of American educational periodicals. At first, apart from unconscious variations due to editorial bent, education itself was considered a sufficiently narrow field. Later, divers interests claimed attention, which resulted in great specialization of content, discussed in a subsequent chapter; identification with the interests of territorial divisions—or, rather, administrative units—will be the principal subject of this chapter. The first journals, while somewhat local in contributors, content, and circulation, were not specifically addressed to the needs of any locality. But in the development of State school systems it was inevitable that State school journals should come into being, in some respects similar to, though not modeled after, the official and local German publications. As these were for many years practically the only educational periodicals published, and still remain important, an account of certain phases of their development will be given. Brief notice will also be taken of county educational papers, a further specialization to meet local needs.

The two agencies most influential in establishing State school journals were State superintendents or commissioners of schools and State teachers' associations. Very often the first local attempt at publication of such periodicals came through one of these means; in other cases there were private pioneer efforts, more or less unsuccessful, which soon gave way to one of the official or semiofficial agencies, with greater responsibility and better resources for support and cooperation.

The first of the journals established and edited by State superintendents of schools¹ were the Ohio Common School Director, conducted by Samuel Lewis and published by action of the State Legislature of Ohio,² and the Michigan Journal of Education,³ likewise circulated by the State legislature and conducted by Supt. J. D. Pierce, "Father of the Michigan public-school system." Both of these were issued beginning with March, 1838. In August of the same year Henry Barnard began the publication of the Connecticut Common School Journal,⁴ under the direction of the board of commissioners of common schools. In 1839 Horace Mann, secretary of Massachusetts Board of Education, began the issue of the Common School Journal⁵ of Massachusetts. The District School Journal⁶ of the State of New York, published by Francis Dwight, appeared in March, 1840, the editor citing in the first issue the State publications of Michigan, Connecticut, and Massachusetts as a reason for aspiring to a place as a State organ.

¹ Barnard: XV, 383: Conn. Com. Sch. J., 1842, IV, 30.

² Ohio J. of Ed., 1862, VII, 224.

³ Hoyt and Ford. J. D. Pierce, "Father of Mich. sch. system," 124-129.

⁴ Conn. Com. Sch. J., 1838, I, 1-5.

⁵ Com. Sch. J., 1839, I, 1.

⁶ District Sch. J., 1840, I, 1, 3.

The Journal of the Rhode Island Institute of Instruction (1845), though nominally the organ of the institute, was edited by Henry Barnard, the State commissioner of schools, as was the Rhode Island Educational Magazine (1852), continued by his successors. The Common School Advocate (1848) was published by the secretary of the State Board of Education in Maine.¹ Of these early State ventures, most of which were somewhat aided financially by the States, as well as others published under private auspices but given official encouragement, only two survived as long as 10 years, and none of the rest for half so long a period. State superintendents continued active in establishing such journals, and States made appropriations toward their support, a phase of the matter discussed later in this chapter.

It is not difficult to recognize the dire need of "official organs" or means of communication with school officers in a frontier State, where school laws were in the making. Inadequate office facilities made the writing of many letters burdensome, if not impossible. Even circular letters, used to answer questions repeatedly asked and to stir enthusiasm for education among school officers and patrons, were both expensive and ineffective. The purposes of State superintendents and commissioners are frequently set forth in justification of their editorial efforts and the official organs. The purpose of the Connecticut Common School Journal² was—

to promote the elevated character of common schools * * * be the organ of communication between the board and secretary and the people * * * contain the laws of the State * * * help school committees and school visitors, help form, encourage, bring forward good teachers * * * furnish some matter adapted to capacity of children * * * and inform as to what is doing in other States—

and of its work the official report was as follows:³

Amid the jarring conflicts of party, and the louder claims of sectarian and other interests, the peaceful and unobtrusive cause of education has received but little attention from the public press generally, either political or religious. It was felt that a journal, kept sacredly aloof from the disturbing influences of party or sectarian differences, and made the organ of communication between committees, teachers, and friends of education in different parts of the State, the depository of all laws relating to schools, and of opinions on questions connected with their administration, and the vehicle of extended discussions and information on the whole subject, would be highly serviceable in awakening an active, intelligent, and efficient spirit in forwarding the cause.

Horace Mann's Common School Journal⁴ briefly states its purpose to be "improvement of the common schools and the means of popular education, not so much to discover as to diffuse knowledge * * * contain laws, reports of the board."

The District School Journal⁵ of the State of New York, in speaking of the official papers of Massachusetts, Connecticut, and Michigan, says:

They are conducted under the superintendence of the officers charged with that subject and are made the organs of communicating to the subordinate officers, to teachers, and to the inhabitants of districts the various information necessary to the correct discharge of their duties and to prevent litigation. They contain also valuable essays upon reforms and improvements of the system, and discussions on various topics connected with education, calculated to awaken attention to the subject and produce a more active and vigorous spirit in forwarding the cause.

¹ Griffin: Press of Maine. Barnard: XV, 383; Me. Jl. of Ed., 1850, I, 14.

² 1838, I, 5.

³ Fourth Rep. Bd. of Commissioners of Common Schs., 1842.

⁴ 1839, I, 1.

⁵ 1840, I, 2.

The Common School Journal of Pennsylvania,¹ which aspired to an official status it never reached, was devised—

To promote a convenient and economical medium for conveying the laws of the Commonwealth and official communications from the superintendent of common schools to the board of directors in each school district of the State.

The general purpose of the pioneer Michigan Journal of Education (1838) was set forth in its Latin motto, doubtless somewhat puzzling to many of the school officers who received it at State expense, *Omnibus scientia sicut omnibus suffragia; literis enim crescit res publica et permanebit.*

As a summary of the purpose and value of a periodical to the State superintendent, the estimate of Supt. Gregory, of Michigan, is given:

After coming into office I weighed carefully the question of exercising the authority given by law to the State superintendent of subscribing for a copy of the Journal of Education for each of the school districts of the State. The need of some such means of communication with the district officers had been frequently asserted by my predecessors and by the superintendents of other States. I finally, the 1st of March, subscribed for a sufficient number of copies to send one to every school director at the rate of 60 cents a year. The small sum of 60 cents to each district is surely no great price to pay for an agency that puts the department in monthly communication with every district board in the State. The Journal has been of great service in giving an early publication to the laws passed the last session, and in carrying the ordinary notifications of the department. A considerable portion of its cost has been saved to the State in the circulars which must otherwise have been issued, and the postage on them. It will be still more useful the coming year, and will probably save the department nearly its cost. Some of the States are accustomed to make appropriations for the circulation of tracts on the subject of education; this goes as a monthly tract to the district, and the influence it thus exercises in promoting the efficiency of our system of public instruction can not be too highly estimated.²

He adds that it is sometimes circulated and read throughout the district.

It being evident enough from the foregoing typical citations that the States could make good use of official periodicals, at least until school systems had passed the pioneer stage and achieved some measure of well-understood stability, an examination of some of the workings of such laws and official arrangements as were made, or in actual operation without formal recognition, will contribute to an understanding of this phase of educational journalism.

The three most important ways in which States have assisted in the support of school journals are:

- (a) By direct financial aid, permitting or requiring the circulation of such periodicals, supported by appropriations from the State treasury;
- (b) By laws and regulations permitting or authorizing local boards or school officers to subscribe, making payment from local funds;
- (c) Through State superintendents and State boards of education by means of official and semiofficial "designations," circulars requesting or advising teachers and officers to subscribe, and pressure exerted by official connection with unofficial publications.

Each of these will be considered in some detail, direct financial support most extensively.

The first State appropriations of money to circulate school journals occurred in Ohio and in Michigan, where those States supported the Ohio Common School Director and the Michigan Journal of Education, respectively. Beginning with March, 1838, the first was continued through November of the same year, and the second until February, 1840. The suggestion of this measure for improving public education probably came from a reading of Cousins's report upon educa-

¹ 1844, I, No. 1.

² Mich. J. of Ed., 1860, 88.

tion in Prussia,¹ which had been generally circulated in the United States, Mrs. Austin's translation appearing in 1834. This report indicates that certain professional literature was annually sent to Prussian teachers at State expense. The next was in Connecticut,² where the assembly in 1840 appropriated \$330 toward defraying the expense of sending to every school society in the State a bound copy of such numbers of the Common School Journal as had been previously placed at the disposal of the committee on schools. In 1840 the State superintendent of New York³ recommended the appropriation of \$2,800 to circulate gratuitously among school officers an official organ of the State department of education, and he cites the example of Massachusetts, Connecticut, and Michigan. Next year, 1841, authority was given the State superintendent to subscribe for a copy for each organized district of the State, all official notices and laws to be published gratuitously.

By the action of the five States mentioned the precedent was well established, and most of the State legislatures were petitioned or "memorialized" in behalf of new periodicals as fast as they were established by the State associations. In some States, as in New Hampshire,⁴ the legislature, after being repeatedly importuned, reported the matter as "inexpedient." In Iowa⁵ a resolution was introduced into the senate authorizing the State superintendent to subscribe for 1,000 copies of the District School Journal of Education, at not more than 80 cents a copy, for the school districts of the State, but it was indefinitely postponed. The editor says this action came as no surprise to him after he had seen the legislators, but a later legislature, more favorably disposed, passed a similar measure. Usually such laws were enacted upon the recommendation of the State superintendent or commissioner of schools after a memorial had been presented by a committee representing the State Teachers' Association. The general nature of the various laws passed may be best inferred by examining the following quotations and summaries:

In New York⁶ the annual appropriation for the District School Journal was not renewed after 1851, and the Journal was discontinued in 1855. A smaller appropriation was made to send the New York Teacher⁷ to town and city superintendents. After being reduced in amount, this was discontinued, and an appropriation of \$1,000 made to send the Teacher to inexperienced teachers.⁸

The Connecticut law, and an indication of its operation, follows:⁹

Resolved by this Assembly, That the sum of \$250 annually be, and the same hereby is, appropriated to the use of the Connecticut State Teachers' Association to be drawn by the order of the president or the controller, to be paid from the civil-list funds of the State: *Provided*, That said association shall furnish one copy of the Connecticut School Journal and Annals of Education, each month, without charge to the active school visitor of each school society. (Passed, 1854.)

A memorial of the State Teachers' Association¹⁰ asked the legislature for an extension of this support in sending to each independent district a copy of the Journal. As indicated, the legislature of 1854 appropriated a sum sufficient to circulate the Journal among school visitors. The State superintendent, J. D. Philbrick, says of this:¹¹

¹ Cousins's Report, 22.

² Conn. Com. Sch. J., 1840, III, 24.

³ N. Y. Dist. Sch. J., 1840-41, I.

⁴ N. H. J. of Ed., 1862, VI, 15.

⁵ Iowa Dist. Sch. J. of Ed., 1853-54, I, 28.

⁶ N. Y. Teacher, 1855, III, 238.

⁷ Ibid., X, 167.

⁸ Ibid., XI, 197.

⁹ Conn. Com. Sch. J., 1855, X, 167.

¹⁰ Ibid., 309.

¹¹ Rep. Conn. Supt. of Common Schs., 1855, 30.

The benefits which were anticipated from this measure have been fully realized. Indeed, they have proved much greater than was expected. Through this medium an edition of the school laws as compiled and passed * * * at the last session was circulated among the school visitors, and a mass of information has been disseminated with reference to the best plans of organizing, instructing, and elevating the character of our schools.

The superintendent then points out the advantage of sending the Journal to every district and recommends that an appropriation be made to enable this to be done. This request was repeated¹ or suggested in most of the annual reports until the Journal suspended in 1866.

By far the longest-continued State support of a school periodical is found in Pennsylvania.² Section 9 of the law of May, 1855, is as follows:

That the Pennsylvania School Journal shall be recognized as the official organ of the department of common schools of this Commonwealth, in which the current decisions made by the superintendent of common schools shall be published, free of charge, together with all official circulars and such other letters as he may find it necessary or advisable to issue from time to time, including his annual report; and the superintendent is hereby authorized to subscribe for one copy of said School Journal to be sent to each board of school directors in the State, for public use, and charge the cost thereof to the contingent expenses of the department of common schools.

This law remained in force until after 1909;³ appropriations for the circulation of the Journal have been continued to the present (1916). According to the provisions of another law, every school director by vote of the local board might receive the Journal at the expense of the district.

The Wisconsin law of March, 1856,⁴ authorized the State superintendent to subscribe for a copy of the Wisconsin Journal of Education for each district and for each town superintendent.

After several years of urging, the Michigan Legislature in 1855 provided for sending at State expense two copies of the Michigan Journal of Education⁵ to each district, one to be sent monthly, the other sent at the close of the year as a bound volume to become part of the district library. This law was in operation two years. The 1857 law follows:

The people of the State of Michigan enact that the State superintendent of public instruction be and is authorized to subscribe for one copy of the Michigan Journal of Education, a periodical published under the direction of the Michigan State Teachers' Association, for each school district in the State, to be sent by mail, the postage being prepaid by the publishers, to the director of the said districts, the price of such subscription to be 60 cents a year for each copy, and such subscription to begin with the January number of the present year. All general laws relating to public instruction and all general notifications issuing from the department of public instruction to be published in such journal free of charge to the State. (Approved, Feb. 14, 1857.)

The North Carolina law, enacted a year or two later, was similar. The Iowa law⁶ permitted the State superintendent to—

subscribe for a sufficient number of copies of some educational school paper, printed and published in the State, to furnish one to each county superintendent but no paper shall be selected which will not publish each decision relating to the school law and which he may regard of general importance. And the certificate of having thus subscribed shall be sufficient authority for the auditor of State to issue his warrant upon the State treasurer for the amount of the subscription.

¹ Rep. Conn. Supt. of Common Schs., 1860, 32; 1862, 21; 1864, 14; 1865, 20; 1866, 68; 1867, 77.

² Pa. Sch. Law, 1855, sec. 9.

³ Pa. Sch. Law, 1873, p. 121.

⁴ Wis. Jl. of Ed., 1857, II, 26.

⁵ 1857, IV, 169.

⁶ Iowa Sch. Law (1911), sec. 2624, enacted 1864.

The Kansas law,¹ 1865, authorized the State superintendent to send a copy of a school journal to every district clerk and required that two pages a month be devoted to the interests of school officers.

Next to Pennsylvania, California made the greatest use of the plan of State support.² The law of 1864 (section 84) declares:

It shall be the duty of the superintendent of public instruction to annually subscribe for a sufficient number of copies of some monthly journal of education to supply each county superintendent, city superintendent, district clerk, and each district school library with one copy thereof. Said journal shall be designated by the State board of education, and shall be a journal devoted exclusively to educational purposes and published monthly in California. The superintendent of public instruction shall be one of its editors. * * * The subscription price * * * shall not exceed \$1.50, and the State board of education shall have power to reduce the rate when said journal can be creditably sustained at a lower rate.

The subscription was paid by the State. It may be noticed that designation by the State board of education was required. No State-subsidized journal in California managed to survive securely, as in Pennsylvania, and several in succession were thus selected. With minor variation the formal designation and agreement is indicated by the following:

Resolved, That the Pacific Educational Journal,³ published monthly by the Educational Publishing Co., be, and the same is hereby, designated by the State board of education as the official organ of the department of public instruction. In making this designation it is understood by the board and agreed by the publishers that nothing of a partisan or sectarian nature shall appear in its columns; that it shall be maintained as a first-class educational journal and that the publishers or their managers shall furnish the superintendent of public instruction on or before the tenth day of each month with an affidavit that they have printed and mailed one copy to each school district clerk or school library in the State. The amount to be paid for each copy of the said Journal shall be the sum of \$1.50 per annum. The copies to be mailed to school clerks shall bear on their title-page the words, "For District School Library." The board reserves the right to revoke this designation at any time, on giving 60 days' notice to the publishers.

The California law of 1864⁴ authorized the State board of education to designate the official organ, after which it was mandatory upon the county superintendent to subscribe for sufficient copies to supply all districts under his jurisdiction. The subscriptions were paid from the library funds of the district. Under this law, still in force in 1901, no State appropriation was made, but since county superintendents or local officers were given no option in case the State board designated an official organ, it closely resembled direct State support, though the money was taken from a local fund.

The following summary indicates briefly the amount of direct State support:

After the pioneer efforts of Ohio and Michigan, Connecticut appropriated \$330 in 1840, and a smaller amount, usually \$250, annually from 1851 to 1865; New York, \$2,800 annually from 1840 to 1845, and \$2,400 a year from 1846 to 1851, and again sums varying from \$800 to \$1,200 annually, 1855-1861; Michigan, at 60 cents a copy, spent about \$2,200 annually, 1855-1861; Pennsylvania, with the exception of a few short intervals, has made appropriations usually between \$1,500 and \$2,500 since 1855, and continues such support; Wisconsin, at 50 cents a copy, expended approximately \$1,700 a year, 1857-1862; Massachusetts aided the State Teachers' Association in supporting the Massachusetts Teacher much of the time between 1857 and 1868, the amount of the annual appropriation usually being \$300; California, with many changes of the recipients of its appropriations, usually spent between \$3,000 and \$4,000 annually

¹ Kansas Educational J., 1866, III, 13.

² Pacific Ed. J., 1887, I, 107.

³ Calif. Teacher, 1866, III, 265.

⁴ Cal. Sch. Law, 1901, sec. 1522, clause 8.

In circulating school journals, 1865 to the close of the century; Kansas from 1865 to 1874 spent a varying amount, probably averaging more than \$1,000 annually upon the *Kansas Educational Journal*; Virginia, 1870-1891, gave its journal an annual support amounting as a rule to a little more than \$500; Rhode Island aided the Schoolmaster with about \$350 a year for several years after 1855; and Iowa, Ohio, Maine, North Carolina, and possibly one or two other States for short periods made annual appropriations to circulate "State" organs. Nevada sent to its school officers the official journal of California. The total amount of money spent by all the States in circulating school journals before 1900 was between \$250,000 and \$300,000, of which Pennsylvania and California expended more than half.

The second means by which States officially lent support to school journals was through permissive legislation authorizing local boards or officers to pay for their subscription out of district funds. There was always an element of local option, even in cases of circulation by State appropriation, for before copies could be mailed to school officers their addresses must be secured, and it happened occasionally that county superintendents or school board members were indifferent to the real or supposed advantages of an educational periodical, or even objected to receiving it, and failed or refused to furnish the publishers with their addresses. Direct State support was more certain, less variable with the times, and was accordingly most sought. But permissive legislation or regulation was much better than none and was gladly made use of in the absence of more acceptable recognition. It was doubtless more pleasant for State legislatures to give an optional local support than to deny in toto the request of a committee representing a teachers' organization, not very numerous perhaps nor politically active, but highly respected. Thus the legislature in Iowa,¹ though unwilling to give direct State aid of great consequence, recognized the "Voice" as the official organ² and authorized district clerks to make the subscription from local funds. The State board of education³ subsequently authorized every district to subscribe for the *Iowa Instructor* and make it part of the library. A single example will serve as an illustration of the permissive legislation enacted in several States, the Minnesota law framed in 1868 and passed at the request of the State superintendent,⁴ which provided that:

Any district clerk desiring to receive a copy of the *Minnesota Teacher and Journal of Education*, at the expense of his district,⁵ may in writing direct the superintendent of schools for his county to order such copy to be sent to him, and for that purpose shall give his post-office address. The superintendent shall thereupon order the publisher of said journal to send a copy of it to such address, which shall be preserved by the clerk and transmitted to his successor in office as property of the district. * * * It shall be the duty of the superintendent of public instruction to examine and approve each issue of said journal before it is issued and to require from the publisher of the *Teacher* a good and sufficient bond.

It not infrequently happened that when it proved impossible to secure legislative support, State school officers discovered that no laws after all were necessary. Thus in Indiana (1863)⁶ after failure in repeated efforts to secure a law with reference to the *Indiana School Journal*, an opinion was rendered that trustees had a right to pay for the *Journal* out of district funds, though the law made no provision for doing so. Though this at first brought only moderate results in circulation,⁷ the decision was given considerable publicity,

¹ *Laws of Iowa*, 1858, 107.

² *Voice of Iowa*, 1858, III, 1.

³ *Iowa Instructor*, 1863, V, 385.

⁴ *Minn. Teacher*, 1868, II, 208, 417.

⁵ *Minn. Sch. Law*, 1873, secs. 73, 76.

⁶ *Ind. Sch. J.*, 1863, VIII, 40.

⁷ *Ibid.*, 1867, XII, 174; XVI, 461.

and in 1867 there were counties in which every trustee and director were supplied at the expense of local funds.

Similarly in Kansas (1885)¹ the State superintendent secured from the attorney general an opinion to the effect that, since school boards "are usually composed of farmers and others who do not know the law, it will be helpful for them to receive the Journal at the expense of the district, if so voted by the people at the annual meeting," and the State superintendent of Nebraska decided that without a specific law on the subject, district boards could legally pay for a copy of the *Nebraska Teacher*² for each member out of local funds, and advises this to be done.

The third means by which States or State officials lent support to school journals was official patronage without specific legal basis, for which the aid of laws was not invoked but much sought after by editors and publishers nevertheless. The most general of these was the mere statement, over official signature of the superintendent, that the Journal was his official organ, accompanied very often by an exhortation to teachers or officers to subscribe. The State school commissioner of Ohio advised each county auditor to take the *Ohio Journal of Education*³ since it would contain school laws and comments. A little later the same advice is given to local school boards.⁴ From the great number of similar quotations which could easily be given, only the following cases are cited:

It is the means adopted by the State superintendent to convey his decisions as to the intent, interpretation, and construction of the school law, and teachers and officers should take it for no other reason save this.⁵

The State superintendent decided to publish monthly all decisions, reports, and questions used in quarterly examinations.

This will practically make the Journal the official paper of the department, and since the subscription price is only \$1 per year, I would like to see it in the possession of every teacher and school officer in Colorado.⁶

A newly elected State superintendent, continuing the policy, affixes his signature to this statement: ⁷

I have this day designated the Colorado School Journal as the official organ of the department of public instruction. * * * This designation is an expression of confidence that this paper should be in the hands of all persons interested in education.

Much more directly than by mere exhortation, State school officers stimulated interest in the State publication by exerting pressure upon teachers who were candidates for certificates. This influence, through a multitude of rather intangible connections, as well as openly and above board, it is quite impossible to measure, but as financial support and legal preference declined it became a rather powerful factor. The State superintendent exerted much of this pressure through his influence upon county superintendents. In the first volume of the *Kansas Educational Journal*⁸ he asks county superintendents to work for the circulation of the Journal. Similar support is in evidence for the *Indiana School Journal*.⁹ If the State superintendent issued a circular letter or pub-

¹ *Western Sch. J.*, I, 214, 1065.

² *Nebr. Teacher*, 1898, I, 155, 147.

³ *Ohio J. of Ed.*, 1854, III.

⁴ *Ibid.*, VI, 263.

⁵ *Southern Sch. J.*, Arkansas, 1893, VI, No. 2, 21.

⁶ *Colo. Sch. J.*, 1889, V.

⁷ *Ibid.*, 1892, VIII, No. 86.

⁸ *Kana. Ed. J.*, 1894, I, 84.

⁹ XVII, 289.

lished a signed statement to the effect that designation of an official organ "is complete evidence of my confidence that the Journal can be safely indorsed by superintendents as a paper which should be in the hand of every teacher," and if in addition it happened that the State superintendent was also editor or financially interested in increasing the circulation, considerable force was given to such an appeal. And if the county superintendent was more or less dependent upon the State superintendent-editor for certification, or fond of the sort of publicity found in the thousand-times-repeated item, "Superintendent _____ of _____ County sends us a 'nice' list of subscribers," the appeal came with peculiar force to timid, inexperienced, incapable, or suspicious teachers, reasonably perturbed over the consequences of an impending examination. There is much evidence that fear of examination or examiners was early seized upon to spread circulation, and that it was in a degree effective. A few examples of thus endeavoring to drive teachers into the subscription list are given by way of illustration.

Indiana State Teachers' Association (1856): "*Resolved*, That school examiners throughout the State be respectfully requested to aid in the circulation of the Indiana State Journal by remitting their fees for examinations upon candidates taking and paying them for the Journal; and that whenever an examiner shall thus procure five subscribers he shall be entitled to one copy free of charge.

A few years later¹ the convention of examiners voted to add 5 per cent to the grade of all candidates who took a school journal, preference being given to the Indiana School Journal, and an examiner is quoted to the effect² that he will lower the grade of any teacher who refuses to take the Indiana School Journal. The superintendent of North Carolina, among other instructions to examiners, issued the following:³

I would especially urge that you ask all, male and female, if they take the North Carolina Journal of Education; and where teachers of experience are found to be without this or any other educational periodical, or any work on the subject of teaching, wholly neglecting such means of improvement, that they be examined with the most critical care and with least allowance for their deficiencies. * * * They owe it to their own character and to the public, deeply interested in their character, to avail themselves of all such means as they can well afford to gain information necessary to the faithful discharge of their duties, and to be unwilling to spare a single dollar for such a purpose argues a narrowness of vision or an indifference to the sacred obligations of the teacher which the public should know and which should meet with your unqualified disapprobation.

The State superintendent of Virginia⁴ recommended that teachers be permitted to subscribe for the Journal of Education in lieu of examination.

Pressure, often of semiofficial nature, was exerted through resolutions of county teachers' meetings, institutes, and associations. "*Resolved*, That it is the duty of each teacher to take the Illinois Teacher,"⁵ from the proceedings of a county association, needs only a change of name to embody the content of thousands of such resolutions in favor of official periodicals. The resolution itself, perhaps, became as trite and conventional as many others regularly included at each annual gathering, but its presence suggests some force, other than its inherent worth, at work to prevent forgetting the needy periodical.

¹ Western Sch. J., 1885, I, 21.

² Indiana Sch. J., 1856, I, 269.

³ Ind. Sch. J., 1862, VII, 372.

⁴ Ind. Sch. J., 1863, VIII, 248.

⁵ Quoted with approval in Mich. J. of Ed., 1869, VII, 275.

⁶ Ill. Teacher, 1856, II, 87.

⁷ Ed. J. of Va., 1871, III, 36.

What was the result of State aid, permissive legislation, State and official patronage described in the foregoing pages? No attempt will be made to answer this question separately for each form of assistance, though certain phases of the answer will apply to one in a greater degree than to the others. Superintendents repeatedly state that, so far as the use of a school journal as a means of communication was concerned, the plan represented a good investment for the State. The Rhode Island Schoolmaster quotes from the commissioner's annual report:¹

The appropriation so wisely made for the distribution of "some educational journal" in the State was given to the Schoolmaster. Three hundred and fifty copies were distributed in the district. I can not conceive of a more judicious or economical expenditure for the advancement of educational interests.

In order to these necessary objects (communicate with school officers), there was only the choice between special circulars and a regular channel of communication.² I begin with circulars, which were found to be expensive and unsatisfactory. * * * The board of education agreed to unite with the educational association in an enlargement of the Journal to its present size of 48 pages, 12 of which belong to this department, and the annual cost to the school fund is about \$500. For this amount every superintendent and every district board in the State receives the entire magazine. The publishers could not afford to do this but for a special donation of \$200 in aid of the Journal from the Peabody Fund. Were I called upon to designate the most useful minor expenditure in connection with the school system, I should name this; and I think that school officers would do the same. The editorial labors thus imposed upon me are considerable, and I have not failed to edit every number for four years without assistance or compensation; but I do it cheerfully, because I see that no part of my work tells better on the efficiency of the school system than the Educational Journal.

At the expiration of State aid in Wisconsin (1863) the Wisconsin Journal of Education³ stated that it was useless to try to maintain a school journal upon private subscription. "Teachers are so generally transient and fugacious that it will not do to calculate upon the renewal of more than one-fourth or one-third of existing subscriptions."

It is easy to show that none of the early school journals paid more than expenses, that few compensated the editors for clerical and even manual labor involved, and that not a few were conducted at great loss, often made up, as will be shown, by the State associations. The editor of the Pennsylvania School Journal⁴ lost \$1,000 and his labors during the first 18 months of the existence of that periodical. The Connecticut Common School Journal,⁵ in its first three years, cost its editor in excess of every and all receipts more than \$1,800. An item of expense not usually included was in this case the payment of more than \$400 to writers of special articles.

Accepting these as typical of many which might easily be chosen, it is safe to say that State superintendents, in guiding the organization of new school systems, considered direct State aid of school journals a good investment, and that it was often a question of State aid or no school periodical.

But there is evidence from the first of certain disadvantages inseparable from such State patronage. In one of the first two journals circulated at State expense, the Michigan Journal of Education,⁶ it is complained that school directors were refusing to take the Journal from the post office because the State had failed to make appropriation to pay postage. In New York,⁷ after a few years, the State legislature voted the appropriation for the District Journal very re-

¹ R. I. Schoolmaster, VII, 55.

² Rept. of State Supt. of Va., 1874, 130-171.

³ Wis. Jl. of Ed., 1864, IX, 272.

⁴ Pa. Sch. Jl., 1854, II, 212.

⁵ Conn. Com. Sch. Jl., 1841, III, 224.

⁶ Hoyt & Ford: John D. Pierce, Founder of the Mich. Sch. Sys., 124-129.

⁷ N. Y. Dist. Sch. Jl., 1847, 1849, X, 60.

luctantly, alleging that school officers were not taking it from the post office, that it was not interesting—even that it was dull reading for which the State was wasting its money.

After commending the Michigan Journal of Education as an official organ, Supt. Gregory remarks:¹ "In a few instances the directors have shown so much indifference as not to call for their copies, but in the great majority of cases it is inquired for with interest, and often is circulated and read throughout the district." Such examples as the foregoing indicate that indifference often characterized the attitude of school officers to the official organs.

A cause of occasional controversy grew out of rival claimants for State aid or patronage. When the Voice of Iowa suspended publication,² its subscription list was transferred to a small periodical of literary nature. The teachers' association of the State³ and the secretary of the State board of education each established organs. All three claimed recognition as the State organ, the first upon the ground of being successor of the original official journal. The State board diplomatically designated all three as equally official. Fortunately the first soon ceased publication and the other two united.

The large sums which were the prize accompanying official designation in California were the occasion of bitter controversy. The first hint of partisan or personal use of the State organ was given by a State superintendent about to relinquish editorial control in favor of his successor, of whose professional spirit he by inference expressed doubt in the following statement:

The Teacher is sustained mainly by the State subscription,⁴ without which it is doubtful whether a journal devoted exclusively to education could find adequate support in California. It is the organ of this department exclusively, and therefore should not be used for the promotion of either personal ambition or partisan views. When thus perverted from its legitimate purpose, the State patronage should at once be withdrawn.

The subsidy was ably defended upon the ground of its economy to the State,⁵ but became a political prize which made or unmade periodicals repeatedly and resulted in contentions among editors, publishers, school officials, and politicians.

Another problem which confronted the editor of a State-aided journal, especially if he were State superintendent, was to keep the public from believing that he was making a fortune in part at the expense of the State.⁶ To keep the public from being uneasy, many statements of receipts and expenditures were published. The average annual compensation for labor of packing, use of office, and occasional items of postage in the first 10 years of the Pennsylvania State Journal was placed at slightly more than \$400.⁷ Six years later, when accused of making a fortune out of the Journal and asked for that reason to discontinue advertising, the editor shows the annual income to be only \$1,000, and that without advertising the loss would be as much. Several of the States fixed subscription prices so low as to preclude profit except through advertising. For \$2,400, the New York District School Journal⁸ was obliged to issue 12,000 copies. Thirty-four hundred copies of the Wisconsin Journal of Education were furnished the State for half as many dollars. Under the terms imposed there was little possibility of private profit at State expense, and citations in preced-

¹ Rept. of State Supt. of Mich., 1860; cited in Mich. Jl. of Ed., VII, 88.

² Voice of Iowa, 1858, III, 1.

³ Aurner: II, 258, quotes Laws of Iowa, 1858, 107, and action of State board, second session, 49-52.

⁴ Rep. of State Supt. of Calif., 1871-72, 80.

⁵ Pacific Ed. Jl., 1887, I, 40; Ibid, 1896, XII, 13; Western Jl. of Ed., 1898, III.

⁶ Pa. Sch. Jl., 1861, X, 87.

⁷ Ibid., 1867, XVI, 56.

⁸ N. Y. Dist. Sch. Jl., X, 60.

ing paragraphs of this chapter show that many editors lost money in attempting to issue unaided periodicals, but public suspicion had always to be reckoned with.

State aid affected circulation directly in proportion to its amount. This applies to the copies paid for by the State, most of which went to school officers. But it is easily conceivable that teachers would find opportunity to read the official copies; it is probably safe to generalize that private subscriptions were in inverse proportion to the number sent by the State. If only county superintendents received free copies, circulation would be but slightly affected; if every school board received a copy from the State and every board member had a right to a copy at the expense of the district, few would be found willing to spend money for the State organ. "The proportion of teachers in any State" who pay for an educational journal which they can read without paying for it is very small; and since the Teacher has been sent to every district, comparatively few private subscriptions have been received." The amount thus received during the first two-thirds of the year was stated to be less than \$50. The accompanying example is given to show how a State subsidy affected private subscriptions in one fairly typical case:

TABLE 1.—*Subscriptions of the Wisconsin Journal of Education.*

Years.	By State subscriptions.	By private subscriptions.
1857-58.....	3,400	499
1861.....	3,380	110
1862.....	3,400	190
1863.....	3,445	251

Permissive legislation, accompanied by exhortation and other forms of official pressure, affected circulation. In the case of Pennsylvania^a there are occasional notices of school boards which even went beyond the limit of their own membership in subscribers for the State organ, one being mentioned which took more than 50 copies for its teachers; the San Francisco board for a time used 150 copies of the *California Teacher*,^b perhaps a third of the entire actual circulation aside from copies sent by the State. But, in the main, school officers, being given legal permission to subscribe from local funds, made slight response. This is made evident in statements of circulation,^c and in the repeated efforts to secure direct State aid, even when the most liberal of local-option laws or regulations had been in operation.

But if State aid decreased circulation among teachers and soon lost its value in most States as an official economy, and permissive legislation was not very effective, general pressure of State and official connections, exercised in the ways described and in others merely suggested, was quite effective in keeping alive and sometimes in giving temporary prosperity to the periodicals thus patronized. The retiring editor of *School Education*^d in 1885 said that only the support of the State superintendent and conductors of institutes made it possible for that journal to live during part of its early existence. A county superintendent is quoted;^e "send me 50 copies of the September issue. I want every school director in my county to see just what is said in the Official Department * * *. The Official Department will be of incalculable benefit * * *. Send me 10 copies regularly."

^a *Calif. Teacher*, 1868, VI, 212.

^b *Pa. Sch. J.*, 1893, XLII, 175.

^c *Calif. Teacher*, 1865, III, 216.

^d *Calif. Teacher*, II, III; *Ind. Sch. J.*, V-X.

^e *Sch. Educa.*, 1885, IV, 97.

^f *J. of Ed. (St. Louis)*, 1868, I, 24.

Another county superintendent,¹ having made subscribing for school journal a matter of certificate credit, found that more than half of his teachers had subscribed, some of them for two or three teachers' papers. In West Virginia² and California³ where, as in other States, teachers were required to fill out information blanks, including an item concerning subscription to school journals, the per cent of teachers subscribing to such periodicals showed rapid increase. In the matter of advertising, connection of a State superintendent or State department with a school journal conferred upon it an advantage. No matter how little actual pecuniary or material interest, it has proved impossible to avoid the opinion that such a journal is the superintendent's enterprise. This is well shown by the following negating quotation:

A principal of a graded school has written a card to Supt. _____ asking how often he would issue *his* paper.⁴ In justice to our State superintendent, we will state that he has no more interest in the Journal than, we hope, our friend who wrote the card has. He wishes us success in our efforts in behalf of education. All school men do the same. He is a contributor to our columns. We hope all who are able to help the cause will do the same thing. The educational department of our State government and the School Journal are separate and distinct, although a clerk in that department is one of the editors and proprietors.

No such "separate and distinct" relationship can be discovered in the vast majority of cases, beginning with the first periodicals with official connections. If the State superintendent, one of his deputies, clerks, or intimate associates were editor, manager, or interested financially, the periodical secured numerous advantages. As an advertising medium,⁵ aside from the actual gain to book and apparatus companies from publicity in a journal more or less widely read by school officers and teachers, it was clearly a good stroke of business to secure the favor of those who at all times have a degree of influence in the selection of textbooks and supplies. And the heads of colleges and normal schools, impelled by the double motive of securing publicity and favor in official circles, very often contracted for more space than circulation, even considering its specialized nature, would command. And a study of the cases in which a State superintendent-editor of a struggling periodical was also a member of the official board in control of an advertising State institution makes it easy to determine from the advertising pages that effectiveness in publicity was not always the sole criterion for measuring the value of space contracted for.

Before leaving the subject of the school journal with official State connection, it may be well to mention the effect upon the character of the periodical itself. The editor of the Wisconsin Journal of Education,⁶ speaking from experience, stated that it was impossible for a State official who is an editor to express independent views or devote time to the business phase of journalism without running the risk of the charge that he is neglecting his proper duties.

The editor of the Western School Journal,⁷ after stating that in his opinion the management of a State-supported journal in Kansas had not been enterprising and that the ratio of teachers on its rolls was greatly decreased, expresses his impression that official support weakened ability to speak impartially.

The limitations and inconveniences of all forms of State control or official connection in time became so apparent that sound business policy found it

¹ *Educationist* (Kans.), 1882, IV, 247.

² W. Va. Sch. J., XVI.

³ Reports of State Bd. of Ed., Calif., 1865-1895.

⁴ *Missouri Sch. J.*, I, Oct. number, p. 10.

⁵ Cf. the advertising pages of journals of the "State" group with and without official connections, especially 1875-1899.

⁶ 1881, XI, 554. The quotation is given in Ch. IV.

⁷ Letter of H. C. Spear in *Sch. Educ.*, 1897, VI, 2.

advantageous to disclaim specifically all such support, the strictly independent appeal taking the place of the "official organ" argument. The following examples illustrate the changed policy of asking for support because of the value of the publication instead of resting partly at least upon its "official" status:

To celebrate this one-hundredth number we have put new ribbons on its cap and printed a few thousand extra numbers to go to persons not now on its subscription lists.¹ To all such we say, "Don't subscribe unless you want to. You needn't feel obliged to 'support the organ of the State Teachers Association,' or to 'stand by your own State paper,' 'to help along a good cause,' or 'to show some professional spirit,' but if you like it, * * *."

School News and Practical Educator announces² that it has never asked support as a "State journal," has not the advantage of being connected with a normal school or other institution upon which to lean for support, but "has been published with the business idea that sensible people will buy, pay for, and recommend to their friends and continue to buy that which is helpful to them." While owing much to county superintendents, no one of them has ever been paid one cent in money, personal "puffs," or editorial flattery to recommend this Journal to his teachers.

The psychology of this appeal to real values was good; it could easily be taken to mean, "This independent periodical is strong enough to walk alone and is probably worth while; to rest upon or to need State or official support is confession of inner weakness or lack of real worth."

The extent and period of greatest prevalence of State support and official connections of this class of journals may be estimated from the accompanying table:

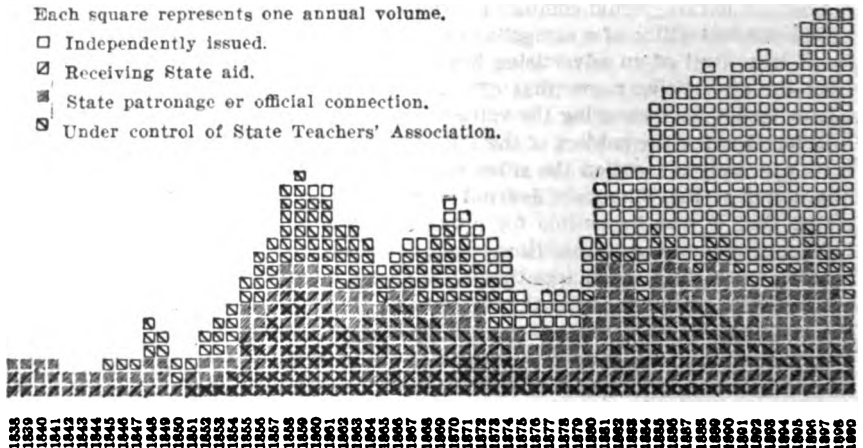
Prevalence of State Aid, Official Patronage or Control, Management by State Teachers' Associations, and Independent Responsibility Among Important School Journals of the "State" Group, 1838-1899.

(For list of periodicals of this group consult section "b" of the bibliography.)

EXPLANATIONS.

Each square represents one annual volume.

- ☐ Independently issued.
- ☒ Receiving State aid.
- ☒ State patronage or official connection.
- ☒ Under control of State Teachers' Association.



Though not the pioneer agency, State teachers' associations and institutes were for many years by far the most active in calling into existence school journals devoted to local State interest. Bernard names³ 20 which had been

¹ Sch. Bul., 1882, IX, Dec. 1891, XVII, No. 85.

² School News and Practical Educator, 1894, VII, No. 9.

³ Am. J. of Ed., 1865, XV, 383-384.

founded or controlled by State teachers' organizations prior to 1865, of which two-thirds were still being issued at that time. The list which follows includes only those established in this way and differs from Barnard's list in omitting some which came under association control after being started:

JOURNALS FOUNDED BY STATE TEACHERS' ASSOCIATIONS.

Illinois Common School Advocate.....	1841
Journal of Rhode Island Institute of Instruction.....	1845
New York Teachers' Advocate.....	1845
Massachusetts Teacher.....	1848
Ohio School Journal.....	1852
New York Teacher.....	1853
Michigan Journal of Education.....	1854
Illinois Teacher.....	1855
Indiana School Journal.....	1856
Wisconsin Journal of Education.....	1856
Missouri Journal of Education.....	1857
Missouri Educator.....	1858
North Carolina Journal of Education.....	1858
Alabama Educational Journal.....	1858
Vermont School Journal ¹	1859
Educational Monthly (Kentucky) ²	1859
Iowa Instructor ³	1859
California Teacher.....	1863
Kansas Educational Journal.....	1864
Michigan Teacher.....	1866
Minnesota Teacher.....	1868
Educational Journal of Virginia.....	1869
New York State Educational Journal.....	1872

The Pennsylvania School Journal, 1852, began as the organ of the Lancaster County Teachers' Association; the New Hampshire Journal of Education, established in 1857 under private auspices, came under control of the State association at the beginning of its second year.

The period of control by the State teachers' associations is shown by the figure on page—

These State association periodicals were much alike in their plan and problems; after the first were in operation, they were imitated by others. A resolution of the Indiana State Teachers' Association⁴ indicates how directly older plans were followed.

Resolved, That this association will publish an Educational Journal, similar in size and typographical execution to the Ohio Journal of Education; that this Journal will be conducted by nine editors (the Ohio Journal had begun with six), appointed by the association, one of whom shall be styled the "resident editor;" and that the Journal shall be furnished to subscribers at \$1 per annum.

The editorial plans and organization of the Ohio, Indiana, Michigan, Wisconsin, Illinois,⁵ Kansas, and other association⁶ periodicals were evidently adaptations of the Massachusetts plan (described in the chapter upon editorship). The Kansas Educational Journal,⁷ directed by a former Ohio teacher, uses the same devices to stimulate interest in subscriptions which the Ohio

¹ The Teachers' Voice had been published in 1854 "under the sanction of the Vermont Teachers' Association."

² Successor of Weekly Family Journal, which was more or less an association periodical.

³ The "Voice" had been indorsed as official organ of the association.

⁴ Indiana Sch. J., 1856, I, 9.

⁵ Ill. Teacher, 1858, II, 328.

⁶ N. H. J. of Ed., 1857, I, 1-4.

⁷ Kans. Ed. J., 1864-65, I-II.

Journal of Education had recently given a trial. A few years later in the same State the *Educationist*¹ in name and character showed the impress of its Indiana editor. The editors in all the newer States had come from older States, and not a few had served editorially in connection with State association journals. As illustrations, Henry Sabin, an associate editor of the Connecticut Common School Journal in 1858, was later connected with the State organs of Iowa; W. F. Phelps, an associate editor of the New York Teacher, 1860-1862, was one of the founders of the Minnesota Teacher, 1867. The chief difficulties in conducting the State association periodicals were those of editorial management. The editorial plan common to all journals of this class will be more fully discussed in a subsequent chapter; briefly it was that of a committee, jointly responsible for securing suitable content. Inseparable from such a plan were certain causes of misunderstanding and consequent lack of harmony in the organizations thus conducting a periodical. A few examples may illustrate, though many could be cited.

The Massachusetts Teacher was the object of debate at the association meeting of 1857.² In the New York State association of the same year the New York Teacher was the subject of much debate.³ Miss Susan B. Anthony moved the addition of two more women to the board of editors; several leading school men objected to the editor's pronounced views upon religious education; the resident editor, by asking that *workers* be appointed as his associates, implied that his previous collaborators had not exerted themselves. A critical member asked whether the Teacher belonged to the editor or to the association; he further wished to know whose function it was to accept or reject articles contributed, the local editor's or that of the board of editors; and for reasons of his own he wished to know whether the local editor could refuse to publish a contribution by one of his associates. A resolution was introduced to devote two pages of each number to parsing and analysis of difficult sentences, in imitation of an English school journal. This was defeated, because other subjects also had claims to a special page.

One more illustration of the difficulties of an editorial enterprise in which all had a right to speak will perhaps suffice. The Indiana School Journal⁴ was the subject of eight resolutions and much discussion at the meeting of 1859. It required a vote of the association to authorize sending copies of the Journal to teachers who had been swindled by a subscription agent. Vigorous discussions of how to make it more "practical" resulted in the establishment, 1861, of a "department of schoolroom work,"⁵ conducted by a college teacher with little help from others. This seemed to afford no relief, and in 1862 there was more discussion and an "insistent" demand for material of value to young teachers.

The State convention of examiners passed a resolution⁶ asking that the exercises in higher mathematics be discontinued, and more "practical work substituted." Such bits of evidence from reports of official proceedings show that both editorship and content were fruitful causes of trouble.

But responsibility for financial support caused the most persistent and inevitable difficulties to the State association journals, for the printer had to be paid. It was part of the routine of each annual meeting to appoint a committee to solicit subscriptions, not alone when the journal was projected, but

¹ *Educationist*, 1879-1885, II-V.

² *Rept. of Mass. State Teachers' Assoc.*, 1857, 43.

³ *New York Teacher*, 1857, VII, 338-341.

⁴ *Ind. Sch. J.*, IV, 1-16 and 260.

⁵ *Ibid.*, 1862, VII, 60.

⁶ *Ibid.*, VII, 370.

as long as the association was responsible for it financially. A typical initial resolution is the following:

Resolved, That a committee of seven be appointed¹ * * * whose duty it shall be to ascertain from the members present the number of copies of such journal at \$1 each for which each member will become responsible, and that said committee be empowered to take the necessary steps for the establishment of a journal.

Only by a combination of fortunate circumstances and remarkable management could a debt be avoided, and annual "collections" had to be taken. State associations were not largely attended, and the burden of support fell heavily. An appeal was made in one case for members to pledge \$25 each, taking their own chances of finding as many subscribers later.² Promises made in the enthusiasm of a crowd and always subject to discount were not remembered, and there were many complaints from editors and publishers that pledges had not been redeemed. From 500 subscribers procured by the State association, the editor of the *Voice of Iowa*³ was said to have received but \$10. Each financial crisis operated to increase the per cent of unfulfilled obligations. Precarious financial support made it difficult to secure a publisher, and though, for the most part, they made no complaint, a publisher once in a while expressed surprise that teachers' agreements were not more to be relied upon.

Thus hampered by ineffective plans of editorship, an occasional subject of debate as to proper content, and a pronounced disposition to become and remain a "poor relation" whose mention at a State teachers' gathering frequently meant demand upon part of a salary not large at best, the State association journals usually passed from the financial and soon after from the editorial control of teachers' organizations. The Ohio association gave up the *Journal of Education*⁴ after six years, even avoiding a deficit by a fortunate sale of several hundred uncirculated sets of the first six volumes. The publishers agreed to give to the association one-tenth of all sums above \$1,500 received from subscribers.

A resolution to separate the management of the *Illinois Teacher* from the association carried by a great majority at the session of 1858.⁵ Pledges made by the association had not been redeemed; all increase of circulation had been due to circulars of the State superintendent and efforts of the editor; the association did nothing for the paper, but hampered the editor in expressing independent views, and a rival paper had caused trouble.

In relinquishing association control the usual procedure was to give financial responsibility to a publisher willing to incur the risk, the association continuing for some years to appoint some or all the editors, such appointments tending to become merely nominal and then ceasing altogether. This in effect gave the teachers an organ, its general character sometimes expressly stipulated in agreements with publishers,⁶ and assured publishers an interest and share of patronage from teachers. The associations very generally continued for some years to pass resolutions in favor of "their" organ, and even made serious efforts through committees to secure subscribers.

Chiefly under the influence of State superintendents of schools, school journals identified with local State interests and usually bearing a State name were established in nearly every State and in most of the Territories. By whatever agency

¹ Rept. of Missouri State Teachers' Assoc., 1856, p. 7.

² N. Y. Teacher, 1857, VII, 831.

³ Iowa Schools, VIII, 10.

⁴ Ohio J. of Ed., 1857, VI, 28, 286.

⁵ Illinois Teacher, 1859, V, 25.

⁶ Ind. Sch. J., 1874, XIX, 32.

controlled, appeal to local loyalty has been a strong motive in justification of existence or appeals for support. It has been assumed with few exceptions that every State or section ought to have such a periodical because others have. The California Teacher¹ thus justifies its inception:

The time has come when the Pacific coast may justly have a voice for the world. It seems not more reasonable to depend upon the East for journals than for daily fogs or daily papers * * * teachers of a particular section need "our own organ."

The short-lived Utah Educational Journal² was undertaken because there was not a single school publication in all the 10 Territories, one-half of the United States. "No central agency whose duty it is to collect facts in regard to the educational interests of this territory, and disseminate such information as will be of interest to American education." A similar sectional appeal is from the Eclectic Teacher of Kentucky (1876):³ "Subscribe for the Eclectic Teacher, the only educational journal south of the Ohio River." "Only a Tennessee paper will do for Tennessee." Thus local appeals,⁴ already noted in connection with semiofficial periodicals, were almost universally used.

But in specializing to meet local needs, content was usually so modified that it appealed chiefly if not entirely to local readers, and many of the States proved entirely too limited a field to insure adequate support. Rhode Island could hardly be expected to support a school journal upon its circulation within the State. It is stated that:

Few educational periodicals are well supported in this country. In a small State like Rhode Island a magazine devoted to education can not be supported by subscribers, and must rely to some extent upon the generosity of the public for its expenses.⁵

Less than 600 teachers were employed in Rhode Island at the time.⁶ The Rhode Island Schoolmaster⁷ circulated more outside the State than among its own teachers, though edited by the State school commissioner.

Boone suggests⁸ that "Each State can well support one paper, rarely more, as a medium of frequent local communication, on legal and administrative matters, with which every teacher should be familiar." The type of paper in the mind of the writer⁹ of the quotation is perhaps that of the German *Ämtliches Schulblatt* or *Schulanzeiger* or the official bulletins of France, all issued under more or less of State patronage and all very unpretentious as to mission and circulated at a very small price, and for such periodicals the statement would probably prove very reasonable; for the general purpose type of journal, characteristic of the local class in this country, not one-half of the States offered even a moderate support during the last 10 years of the nineteenth century. In spite of the general purpose ideal, clear recognition is occasionally given by editors of the insufficiency of anything attainable by a local periodical. The editor of the Colorado School Journal says, after announcing reduced subscription rates for an eastern periodical of considerable circulation:¹⁰

It is understood that our little State paper can not supply the necessary amount of professional reading. The articles in * * * are from the ablest

¹ Calif. Teacher, I, 3, 25, 1863.

² Utah Ed. J., 1875, I, 4.

³ Eclectic Teacher, I, 376.

⁴ Ed. Record, 1881, I, 6.

⁵ Rhode Island Educational Mag., 1838, II, 85.

⁶ Ibid, II, 142.

⁷ R. I. Schoolmaster, 1835, I, 95.

⁸ Boone: Educ. in the U. S., 152.

⁹ Arndt.

¹⁰ Colo. Sch. J., II, No. 1.

writers, the subjects discussed are always selected from the live topics of the time, and the general tone of the magazine is such as to satisfy the reader. The Colorado School Journal will endeavor to present from month to month items of local interest and articles from our Colorado writer, * * * will supplement the value of the Journal with such solid and readable contributions as shall be readable to every teacher.

Further recognition of the painful limitations imposed by State lines is found in attempts at combining various State interests and in a few serious attempts at consolidation. The Kansas Educational Journal, 1868,¹ says:

The prevalent idea that each State must support one or more journals of this class is one manifest reason why "educational" periodicals are ordinarily the most dry, tedious, worthless of all possible publications. Consolidation means enlargement, progress, careful editorship, increased intrinsic value.

The New Jersey State Teachers' Association disposed of the school-journal question by adopting the New York Teacher² as its official organ, electing a State editor and continuing this relationship for several years. A motion to unite the Vermont Journal with the New Hampshire Journal of Education³ received an adverse vote in 1862, though neither periodical was strong enough to continue long alone. The Eclectic Teacher of Kentucky⁴ had State editors representing eight States of the South and was at times official organ of various State teachers' associations and of the Southern Educational Association. State superintendents generally adopted officially the journals published in other States.

The California Teacher was circulated at State expense in Nevada;⁵ the Ohio Educational Monthly,⁶ in Tennessee and West Virginia; the Kansas Educational Journal became official organ of the department of public instruction in the Cherokee Nation; the Western School Journal, of the State superintendent of Nebraska,⁷ and there were many similar combinations, indicating a tendency to avoid establishing local organs, necessarily weak and ill-supported, by making use of others already in operation.

In addition to consolidations due to failure to secure support, which were of frequent occurrence, two notable efforts were made to unite the educational journals of a large section of the country, the resulting publication in each case being a weekly. By the first of these combinations the New England Journal of Education⁸ was formed (1875) from the union of the Massachusetts Teacher, Connecticut School Journal, Rhode Island Schoolmaster, and College Courant (New Haven), joined soon after by the Maine Journal of Education. With the exception of the College Courant, these had all been State teachers' association organs. The new periodical was conducted under the auspices of the six New England State teachers' associations and the American Institute of Instruction, each State association appointing an associate editor and the six State school commissioners being added as associates. This occasioned no violation of historical continuity, since it brought the nominal editorial force to the number usually thought necessary to control an association periodical. T. W. Bicknell, of the Rhode Island Schoolmaster, became editor.

The second noteworthy attempt at consolidation, short-lived in its unifying results, was the Educational Weekly⁹ established in Chicago in 1877. It united

¹ Kans., Ed. J., 1868-69, 275.

² N. Y. Teacher, 1856, III, 282; 1858, VIII, 218.

³ New Hamp. Sch. J. of Ed., VI, 858.

⁴ Eclectic Teacher, 1876, 210, Vols. III, IV.

⁵ California Teacher, 1865, II, 330.

⁶ Ohio Ed. Mo., 1868, XVII.

⁷ Kans. Ed. J., 1869, V, 275; W. S. J., 1885, I, 291, 315.

⁸ N. E. J. of Ed., 1875, I, 7, 12.

⁹ Ed. Weekly, I, X.

the *School Bulletin* and *Northwestern Journal of Education*, Wisconsin; the *Michigan Teacher*, *Illinois Schoolmaster*, *Nebraska Teacher*, *Home and School of Kentucky*, *School Reporter of Indiana*, and *School of Michigan*. This paper in its career of approximately five years performed almost a complete evolution back to the local type. Beginning with a chief editor and 3 associates, it soon had 11 State editors, an eastern editor and a southern editor. For some time after 1878 it published one general and eight State editions, the latter being monthly. The content of the general edition illustrates the difficulty, if not the impossibility, of combining in any interstate periodical much of the material to which local journals gave so much space—State laws, directions for making reports in legal form, accounts of local institutes and “gossip” of the type which states that “Mr. _____ has closed a successful term of school at _____ village,” all of this possessing little or no interest except locally.

The same difficulty was illustrated in such cooperative ventures as the *American Journal of Education*, St. Louis (1868). At various times in its long career it issued from at least 16 addresses, in half as many States, editions identical except for the title page and a few local notes. The State superintendent of a Northern State, adopting these journals as his official organ, maintained an official department which appeared in all editions. Personal notes of local normal schools and colleges in Missouri appeared in journals ostensibly local to Monroe, La.; Huntsville, Tex.; or Topeka, Kans.

But although many States offered no adequate field for the support of a school journal, with the single exception of the *New England Journal of Education*, consolidations were neither successful nor in the direction of improvement.

A further specialization to meet local needs was the county school journal. The earliest and in some respects the most interesting of these was the *Essex County Constellation* (1846). Contemporary school journals recognized it as “devoted wholly or in part to education.”¹ Its motto was “Education, the Archimedean lever, which is to move the world.” Of its list of 20 regular contributors, 4 were ministers and several of the others principals of schools. A third of its content is devoted to schools, including articles upon National and State education, teachers’ qualifications, and reports of teachers’ associations and institutes. The remainder of its space is principally occupied with current events, scientific intelligence, and moralized stories. Printed around the four margins of each page are mottoes similar to those once more often than now found in schoolrooms. Published weekly, this paper was discontinued at the close of its first volume “because of the illness of the editor and for other reasons,” inadequate support. County teachers’ organizations occasionally established official organs, as in the case of the *Pennsylvania School Journal*,² with its fifty subscribers among Lancaster County teachers before its sphere was widened, and the *Teachers’ Educational Journal of Auburn, N. Y.* (1858), “devoted to the elevation of the public schools under supervision of Cayuga County Teachers’ Association.” In a few instances several counties in association united in indorsement of a local paper; thus the *School Record* (1894-1896) was the organ of the Tri-County Association of Wayne, Ashland, and Medina Counties in Ohio. •

Such papers originated in the demand for specific help upon very local problems. The *Teachers’ Journal* just mentioned, said the *New York Teacher*,³ was very good, but did not meet the needs of country schools. The same demand is given homely expression in the *Country School Journal*,⁴ Maynard, Ark. (1899), which states that its editor is a teacher who intends to call attention

¹ Ohio, Sch. J., I, 53; II, 95.

² Pa. Sch. Jour., 1854, I, 257.

³ I, 17.

⁴ I, 8.

to the mistakes of teachers in country schools and to deal specifically with their problems. Other journals, most of which are for large schools with superintendents, do not consider—

what to do with the boy who, with his finger pointing to a word which he himself has hardly seen, carries his blue-back spelling book to the teacher with no other purpose than accidentally to kick the rock from under one end of the half-log bench on which are seated 10 or 12 pupils, merely to see them tumble over. * * * Or do they tell you how to induce Farmer Jones to send his children the full three months' term, whether the cotton is to pick or has been picked.

Further reasons for the establishment of county periodicals are given, typical of many which might be found.

There is room in our county for a half-dozen papers to represent news, politics, etc.; should there not be room for one to represent education, in which every good citizen is interested and for which the principal part of our taxes are paid.¹

We wish to state that the School News was established in 1887 as a local journal for the express purpose of assisting teachers in introducing and successfully using a "Manual and Guide" or course of study in the rural schools.²

Devoted exclusively to school matters * * * with the purpose of aiding teachers and boards of education in systematizing the work.³

In imitation of State officers, county superintendents made county periodicals official organs of communication with their teachers and endeavored to follow the larger journal as to departments and content. The best, represented by County School Council or the Christian County School News (Illinois, 1887), include material of real service to a country teacher. Quoted articles, which constitute content, are selected with discernment. About half of the professional material consists of method and devices, suggestions of possible use to a teacher of little training or experience. Thought-provoking quotations from the best-known educational writers of the time are not entirely absent. Current events, county items, queries and answers, and examination questions were usually found in country teachers' papers; in the poorest there was little else except advertising, which was a large item, of course, but no greater than in most educational papers. The small territory served, and the subscription price, usually 50 cents, made all thought of serious editorial attention out of the question. The first few issues were often the only ones of value; having used his little literary capital, the editor filled his columns with miscellaneous material clipped from other papers or discontinued publication. The expense, which was frequently mentioned as a cause of suspension, usually fell upon the same person who carried editorial responsibility. Losing money and bankrupt of material to publish, the career of such periodicals was usually very brief. Peculiar circumstances sometimes enabled a county periodical to expand, as in the case of the Pennsylvania School Journal, previously noted; the Hatchet, of Emporia, Kans., which through successive changes became the official periodical of the State; or the Guernsey County Teacher (1880), which became the East Ohio Teacher and is now issued as the Ohio Teacher.

The Minnehaha Teacher, Sioux Falls (1886-7), was published as a county paper more than 10 years; the Public School, of Tippecanoe County,⁴ Ind. (1882—), outlived all similar publications in that State and survived nearly as long. Such cases form marked exceptions to the usual course of events. The first considerable group established by county superintendents was in

¹ Christian County (Ill.) Sch. News, I, No. 6, p. 16, 1887.

² Ibid., IV, No. 6, p. 16, 1890.

³ The Franklin Co. News, Ohio, quoted in Ohio Ed. Mo., XIV, 579, 1896.

⁴ Ind. Sch. J. (1889), 709, (1891), 164.

Michigan; ¹ of 12 in the field between 1868 and 1872 all but 1 had suspended before 1873.

The cooperative plan, so generally employed among local newspapers of the Middle West, was, of course, given a trial by county school papers. In 1880 the Educational Newspaper Union reported editions in a dozen or more places; the Iowa Teacher, of Charles City, had no less than 65 county editions at one time, not all in Iowa. This plan, by capitalizing the advertising, relieved the local editor of financial anxiety, as indicated by this advertisement:

To county superintendents: Have you a local teachers' paper? We will furnish you an eight-page paper, filled with professional matter and local news, at a price which is little if any more than you spend each month for circulars and other means of announcements to your teachers. Every county needs a local teachers' paper.²

It also relieved the editor from the task of finding content, the only local features being the name on the title page, a few local advertisements, and an exceedingly small number of local items and official communications. The general content of a great number examined by the writer bears little evidence of careful selection or acquaintance with the needs of those among whom such papers were designed to circulate. The cooperative plan was not more successful in the case of county school papers than among those of more ambitious claims previously discussed.

The accompanying table shows the number of county school papers of which the writer has a list. Doubtless there were others, but from this an idea of their time and place may be gained. In estimating the number in existence at a given time, it should be remembered that the date of establishment was usually not more than one or two years prior to that of suspension. It is evident that the "county school journal" as conducted was passing from the stage; since the last period included in the table, this tendency has continued. The table does not include other types of local school journals than those devoted to county interests.

TABLE 2.—*Date of establishment of county school journals, by five-year periods.*

States.	Before 1865.	1865- 1869	1870- 1874	1875- 1879	1880- 1884	1885- 1889	1890- 1894	1895- 1899	Total
Illinois.....					4	15	.....	1	20
Indiana.....				2	9	8	.....	1	20
Iowa.....					9	26	24	7	76
Kansas.....				2	3	10	22	15	52
Michigan.....		7	5	3	2	4	3	.....	24
Minnesota.....					1	7	10	2	20
Ohio.....				1	5	8	5	3	19
Pennsylvania.....	2	.....			2	4	1	3	11
Other States.....	2	.....		1	3	12	10	11	39
Total.....	4	7	5	9	38	91	85	43	262

Aside from the passing phenomenon of the county school journal, this chapter has shown the part played by State teachers' associations in developing educational periodicals, and the unsatisfactory experience of these organizations in conducting them. It has also been indicated that the part played by State officials in this field was not unattended by numerous disadvantages. On the whole, after a brief pioneer period, State official connection with school journals exercised a doubtful influence upon the esteem in which such periodicals were held; in time this influence lost whatever value it once had and became very often an economic expedient to keep alive school journals which did little but live. Further results of official connections will be treated in the chapters upon editorship, content, and circulation.

¹ Interstate Sch. Rev., VII, No. 33.

² Mich. Teacher, 1873, VIII.

Chapter IV.

EDITORS AND CONTRIBUTORS.

An important problem of the school journal, regardless of the auspices under which it was issued, has been that of editorship. Corresponding to the main lines of development, the three phases—official, teachers' association, and independent editorship—will now be discussed, followed by a consideration of conditions and practices common to all of these.

The earliest State-supported or subsidized journals were issued by State commissioners or superintendents, and, of course, edited by them. Reports concerning education in other States or in foreign countries, laws, regulations, and comments constituted the chief content of such periodicals. As the States of the Mississippi Valley developed and school systems took form, there was need for much of this material adapted to a pioneer stage and directed to school officers rather than teachers. But after systems had been established, and been many years in more or less successful operation, no great need of enlightenment concerning school law existed, and there was less interest in foreign measures, local pride even showing unwillingness occasionally to give serious heed to plans perfected in older communities. As teachers rather than school officers became the readers of school journals, the editorial problem increased in difficulty; State school officers usually became editorially bankrupt after a relatively short time. Even Horace Mann's Common School Journal showed signs of exhaustion long before it reached its tenth volume, and no other official editor was able to do half as well during half so long a period. In the great majority of State association publications, State commissioners or superintendents maintained official departments, occupied the position of associate editor, nominally filled the editor's chair, or actually did the editor's work, but never long very effectively, or without full consciousness that official editorship was not a success.

The following quotations indicate recognition of some of the difficulties:

So when we were tired of adding columns of figures in the "returns," or answering letters of "inquiry," or of drawing up "decisions," or answering "questions," or preparing "lectures," or giving "instructions," we rested ourselves by making notes for the Schoolmaster.¹

We have had to snatch odd moments, in the midst of a multitude of other cares, to do what has been done in that line (editing). An office, crowded almost every hour in the day by persons having business to transact * * * is not the most favorable place for the accomplishment of scientific, literary, or educational work such as should be brought to bear in getting up a journal of this sort. We have done the best we could, however, under the circumstances, and can only express the wish that the work had been done better.²

In the first place, the editors and publishers being the State superintendent and his assistants,³ they are estopped by the pressure of official duties, and the salaries paid them by the State for their services, from pushing the business interests of the Journal sufficiently to warrant them in putting money into

¹ R. I. Schoolmaster, 1856, I, 375.

² Thomas Smith: State superintendent in Arkansas. *J. of Ed.*, 1872, III, Nov. 12, p. 21.

³ Wisconsin *J. of Ed.*, 1881, XI, 554.

its columns by way of payment for original articles. It is true that most of the better papers delivered before the State Teachers' Association * * * find their way into its columns, it being the organ of that body; but in spite of that fact, the usual dearth of proper and desirable material for its pages is something harrowing to the men responsible for its contents * * *. To do for the Journal what should be done by its publishers would render the officials who manage it open to the charge of devoting time and strength that belong to the State to a private enterprise. And there would be no lack of persons ready to make the charge, which would certainly be uncomfortably near the truth. In the second place, as editors the same officials are shorn of that freedom and independence which are essential to vigorous journalism in any department. The liberty of open and incisive criticism is denied them by the unwritten law of propriety. It is quite impossible for them to divest themselves of their official characters and speak from the standpoint of untrammelled citizenship; and so they must say only what is right and becoming to emanate from this department of public service, and a multitude of things that ought to be said through the columns of an educational journal are never uttered.

In considering the ideal school journal, Compayre says:¹ The essential thing in an enterprise of this nature, as in all other human enterprises, is that it should have at its head a man who is the soul of it, whose strong will shapes every detail of its publication, who by his experience and personal knowledge is in the mid-current of scholastic affairs, and finally whose mind and heart are well-springs of inspiration and enthusiasm.

It was clear at all times that whatever other qualities a State superintendent-editor might possess, he could not long be the "soul" of any journalistic enterprise, and that in the division of his time editorial duties would suffer in competition with interests more certain to assert themselves. State school officers have usually been elected because of political or executive ability, and have served for one or two short terms; since the early period at least, they have in the main been sought for editorial service because of financial and business advantage rather than peculiar literary or professional ability, though there have been exceptions to this general statement. Because of insufficient time to devote to such work, lack of literary ability, and the handicap upon independent utterance imposed by official status, State school officers, while performing much very useful service, can not be said to have furnished many examples of effective editorship.

The usual plan of editorship among State association periodicals was that employed by the Massachusetts Teacher from its beginning in 1848, and followed during varying periods by most such publications. The typical scheme included appointment or election by the association of a resident editor, and from 3 to 17 associate editors, the number in the great majority of cases being between 6 and 15. Usually one of the associates was designated "mathematical editor," his specific function being to propose, solve, or explain difficult problems. It was realized from the first that associate editors, unless given definite responsibility, would, generally speaking, contribute nothing. To insure participation of all, the "monthly editor" plan, first used by the Massachusetts Teacher, was very generally adopted. According to this arrangement, each editor was responsible for the content of one or more monthly numbers. As a reminder the editors' names and monthly assignments were carried with each issue. A modification of the plan, used by the Iowa Instructor,² required each editor to furnish four original articles a year.

It is not difficult to comprehend that the plan of rotating editorship involved problems of adjustment and could not at best promise harmony of aim. Commenting upon its first trial, the Common School Journal³ is quoted:

¹ Compayre: *Educational Journalism in France*, Ed. Rev., 1900, XIX, 121-142.

² 1865, VII, 4; VIII, 18.

³ 1848, X, 1.

The Massachusetts Teacher, in its second number, has undertaken to ridicule and discourage several of the improvements which the enlightened friends of education have hoped to introduce into our modes of instruction and discipline. It is due to the zodiac of editors who volunteered to conduct the new journal to say that only two of the "Twelve signs" were aware of this attempt to extinguish the Sun. The Crab and the Scorpion are curious animals, one always preferring to go backward, and the other stinging itself to death when it can not have its own way.

The editor for the third month refused to contribute because he was not in accord with his predecessor.¹ A more general cause of complaint was failure to act or contribute without assigning any reason. The resident editor of the Ohio Journal of Education² wrote 150 pages of volume five, the associate editors 42; a third of the monthly editors failed to respond, leaving the resident editor to shift for the Connecticut Common School Journal as best he could; the Indiana School Journal³ complained that associate editors did nothing; the editor of the New Hampshire Journal of Education states that:

The names of 12 teachers stand upon the covers of the Journal of Education⁴ as editors. Will those whose names are on the outside, but whose articles are never on the inside, oblige the public by giving their ideas of the duty of an editor to his journal and its readers?

Four years later a modified plan seemed to be no more satisfactory, for although each of the 12 associate editors had agreed to contribute six articles, only 5 of the 72 due during the year had been received at the end of six months.⁵ When the State association of Massachusetts⁶ found fault with the management of the Teacher, the editor replied that he would willingly publish what was desired if he could learn what that would be; left to furnish the material himself, he had done the best he could; he suggested that others might write something. The position of editor apparently was an honor from which it was considered good fortune to be free. The New Hampshire association⁷ voted to excuse four associate editors each year, beginning with those of longest service; the Wisconsin Journal of Education⁸ lapsed four months while an association committee searched for an editor; and in discontinuing group editorship the same journal stated⁹ two objections to the plan, namely, that few associate editors ever contributed, and that the very fact of their being given an editorial status pointed them out as privileged to write, thus deterring others who might wish to contribute but feared to intrude.

Such defects, inherent in the plan, as have been pointed out—lack of harmony, uncertainty of policy, varying literary ideals, indifference, and the inability of an association to select editors upon the basis of fitness for their work—led to its abandonment. The Massachusetts Teacher,¹⁰ with which group and rotating editorship for school journals originated, declared the arrangement a failure after 18 years of experience; after trials varying from one to a score of years in different States it was given up everywhere.

The accompanying table shows something of the importance of group editorship. In addition to the periodicals in this list, the plan was tried for brief periods in other States, as follows: Southern School, Georgia, 1854, 1855; Missouri Educator, 1868, 1869; Kentucky Educational Monthly, 1859; Kansas Educational Journal, 1864; Maryland Educational Journal, 1867; and in slightly modified form by the Educational Journal of Virginia for a short time beginning with 1869.

¹ Mass. Teacher, I, XVII, 416.

² 1857, VI, 23.

³ II, 380.

⁴ 1858, II, 279.

⁵ Ibid., 1862, VI, 15.

⁶ Proc. of Mass. Teachers' Assoc., 1867.

⁷ N. H. J. of Ed., 1858, II, 279.

⁸ 1857, II, 20.

⁹ Ibid., 1862, VII, 75.

¹⁰ 1865, XVII, 416.

TABLE 3.—*Group-editorship of State teachers' association periodicals.*

	Number of editors.		Group plan continued.
	Smallest.	Largest.	
Massachusetts Teacher	12	18	¹ 1848-1874
Ohio Journal of Education	6	7	1862-1867
New York Teacher	12	15	1853-1866
Connecticut School Journal	6	12	² 1864-1862
Michigan Journal of Education	12	12	1864-1880
Illinois Teacher	6	12	1865-1838
Rhode Island Schoolmaster	9	17	1865-1868
Wisconsin Journal of Education	9	17	1866-1862
Indiana School Journal	9	14	1866-1864
Iowa Voice, Instructor	6	16	1867-1868
New Hampshire Journal of Education	12	13	1868-1868
North Carolina Journal of Education	16	16	1868-1861
Maine Teachers Journal of Education	12	12	³ 1869-1874
California Teacher	3	6	1864-1876

¹ Group plan discarded during 1872.² Later revived; 12 or 14 editors.³ Except 1862-1867.

In concluding the discussion of this topic, it is but fair to remark that the group-editor plan, with all its shortcomings, was probably the only course which the State associations could adopt. Sectarian and political jealousies were so strong that almost every editor found it necessary to declare his paper free of such bias. The most guarded statements were subject to misinterpretation. State associations found it necessary to pass many such resolutions as the following:¹

Resolved, That the management of the Massachusetts Teacher be referred to the board of directors of this association with the understanding that, while the pages of the *Teacher* shall be open to a fair consideration of all purely educational subjects, they shall be kept free from the introduction of party politics and controverted points in theology.

With all caution, reinforced by such resolutions, it is doubtful whether any man, though a literary and editorial diplomat, could have met the requirements of the teachers' organizations, the teachers individually, or the public. An incidental accomplishment of the plan was the training in service of many who later became editors or contributors. A glance at the table will show that, so far as the numbers are concerned, the plan constituted no mean school of journalism.

Until school journals became at least nominally independent of official influence and actually free from direct control of the associations, long periods of editorial service were seldom possible. Four exceptions to this statement may be noted: Horace Mann as secretary of the State Board of Education in Massachusetts remained editor of the Common School Journal 10 years, and three of the State superintendents of Pennsylvania have been editors of the Pennsylvania School Journal for terms of 18, 11, and more than 25 years, respectively. Of periodicals under association control, only the New York Teacher furnishes an example of a 10-year period of editorial service, that of James Cruikshank, 1856-1867.

A tendency toward somewhat greater stability of editorship was apparent among independent journals. The list which follows includes all the periods of editorial service in excess of 10 years among State and unspecialized periodicals:

¹ Proc. Mass. Teachers' Association, 1867.

Periods of editorial service.

Periodical.	Name of editor.	Period of editorship.
Ohio Educational Monthly.....	E. E. White.....	1861-1875.
Ohio Educational Monthly.....	Samuel Findley.....	1882-1894.
Pennsylvania School Journal.....	T. H. Burrows.....	1859-1870.
Pennsylvania School Journal.....	J. P. Wickersham.....	1870-1881.
Indiana School Journal.....	W. A. Bell.....	1849-1899.
American Journal of Education.....	J. B. Merwin.....	1868-1893.
National Educator.....	A. R. Horne.....	1860-1900.
New England Journal of Education.....	T. W. Bicknell.....	1875-1884.
(Schoolmaster) Intelligence.....	E. O. Valle.....	1881-1905.
Educational News.....	A. N. Raub.....	1885-1900.
Colorado School Journal.....	Aaron Gove.....	1885-1903.
Public School Journal (School and Home Education).....	Geo. P. Brown.....	1836-1900.
Western School Journal.....	John MacDonald.....	1888-1916.
Missouri School Journal.....	H. A. Gass.....	1889-1916.
School News and Practical Educator.....	C. M. Parker.....	1887-1916.
School Moderator (Moderator Topics).....	H. R. Pattengill.....	1889-1919.
LONGEST PERIODS OF SERVICE. ¹		
School Bulletin.....	C. W. Bardeen.....	Since 1874.
Journal of Education.....	A. E. Winship.....	Since 1884.

¹ Of editors still in service.

The foregoing lists do not include method and device papers, in which publishers are more prominent than editors, nor journals devoted to special fields or to higher education. Of all those named, very few made editorial work their business; the rest and practically all others who for much shorter times have been editors of school journals have also occupied school positions or combined their journalistic efforts with more profitable undertakings which school journals through advertising could assist. This phase of the problem will be discussed in the chapter upon "Financial support." The fact that editing a school periodical has with few exceptions been an avocation pursued for a short time or an adjunct to some more serious enterprise is of importance in estimating the character of editorship.

The function of the editor of a school journal has been to create content for his columns or use discrimination in finding it. The editor of an association periodical left without much assistance from his associates had the choice of evolving material from his inner consciousness or of using the scissors. In all classes of journals creative work was easier during the first of an editorial term than later. More than half of the content of the *Western Teacher* (St. Louis, 1853) was written by its editor, a busy school superintendent. Alfred Holbrook was author of about half the actual content of the *National Normal* (1868) during its first volume, though he was actively engaged in strenuous school work. There are many examples of editors who tried to write a large number of articles, but in every case quoted material had to be relied upon before long, and, of course, was better, if selected wisely. Aside from the large question as to the fields which a school journal could legitimately appropriate, discussed in the chapter on "Content," the amount and character of the quoted articles was of most importance.

Quoted material has always occupied a very large part of the space of school journals. The *Eclectic Teacher of Kentucky*¹ frankly states that its editors have no time to be original; it then proceeds to prove this by quoting from other school journals all except a few news items. In an entire volume, aside

¹ 1876, I, 23.

from these answers to questions and references to itself, there are not five pages of original material. Many of the commercialized, cooperative local papers quoted all their material, very often without giving credit.

The very general use of pseudonyms in the earlier periodicals sometimes renders it difficult to identify writers of articles. Index, Philanthropos, Virginlensis, and Vide wrote for the *Educational Reporter* (1830); Pedagogus, Locke, Common Sense, Genevensis, Spelman, E. B., and Jonathan, for the *District School Journal* (1840); Excelsior, Sigma, Square Toes, Petrus Pedagogus, Senex, Puto, Quilibet, Oma Purros, Seneca, Humanitas, Lupus, Vindex, Reporter, Quantam, Paoli, Agricola, Kitt, Jane, and Amor for others before 1860. Mere initials were often the only signature. It was, however, in most cases possible to identify all important contributors or sources of quotations by means of formal editorial mention of leading articles.

Aside from writers with an official status, such as Stowe, Cousin, and the State superintendents, whose documents were largely republished, the most generally quoted important contributors before 1840 were James Carter, William Russell, W. C. Woodbridge; Jullien and Jardine, the first French and the other Scotch; Hall and Abbott, who wrote chiefly upon school management; William Alcott, Wilderspin, Thomas Dick, J. M. Keagy, and T. H. Gallaudet, who contributed the equivalent of a fair-sized volume, his major interests being the English language, normal schools, and the education of defectives, especially the deaf.

From 1840 to 1860 the educational writers most often quoted were Horace Mann and Henry Barnard, the former usually upon very general subjects, the latter chiefly with regard to school architecture. Preeminent during the period from 1860 to 1900 were W. T. Harris and E. E. White. Each of these contributed more than twice as much as any other educational writer; both were quoted during a period of about 50 years in nearly every periodical. Both wrote well upon a great number of subjects, Mr. White writing with great common sense upon method and management, the rural school, and similar subjects of practical intent to teachers. As the successful editor of the *Ohio Educational Monthly*¹ many of his articles appeared editorially. Of his work he says: "During these 14 years we have written over 2,500 editorial pages, discussing nearly all educational subjects of practical interest." Dr. Harris's contributions, dealing with an even greater diversity of subjects, tended toward the philosophical. Among the topics upon which he wrote most extensively were problems of the college and university, the curriculum, the kindergarten, psychology, esthetics, the rural school, and manual training. Aside from his educational labors he wrote much for philosophical magazines. After 1880 for a short time Col. F. W. Parker was frequently quoted, one-half as often perhaps as Mr. White. Considering only educational writers who were extensively quoted during a period of 25 years or more, the most often and generally quoted rank as follows: W. T. Harris, E. E. White, Horace Mann, F. W. Parker, B. A. Hinsdale, J. M. Greenwood, Anna C. Brackett, W. N. Hailmann, and J. L. Pickard; but the contributions of the first two were about as numerous as those of the rest combined. Other important contributors not already mentioned were D. P. Page, quoted widely before 1860 on the relations of teachers and parents and upon school management; Dio Lewis, upon physical education, 1855-1875; Elizabeth Peabody, usually upon the kindergarten, 1855-1880; Norman Calkins, upon object-teaching, 1855-1875; W. A. Mowry, W. E. Sheldon, Della Lathrop, A. D. Mayo, E. O. Vaile, J. D. Gregory (1865-1886), on "Seven laws of teaching"; C. M. Woodward, on manual training, 1875-1885. L. R.

¹ *Ohio Ed. Monthly*, 1875, XXIV, 147.

Klemm, J. M. Baldwin, Geo. P. Brown, Charles De Garmo, C. W. Elliot, W. H. Payne, Henry Sabin, A. E. Winship, G. S. Hall, and Charles McMurry were generally quoted more than locally after 1880.

The earliest important contribution by a woman appears in the *American Annals* (1834, IV). Women were frequently elected by the associations upon the editorial board. Two of them, newly elected editors of the *Michigan Journal of Education*¹ (1854), served willingly, but modestly refused to allow their names to be published. Such modesty, occasionally manifested, the general practice of publishing unsigned articles, and the fact that method and device articles (in the writing of which women contributors were most active) are the type most often quoted without credit to the author, make it difficult to determine women's share in supplying professional reading. A few fields are, however, easily differentiated. With the exceptions of the articles by Dr. Harris and W. N. Hallmann, nearly everything concerning the kindergarten was written by women, as was 60 per cent or more of the method and device material after 1880. A careful study and tabulation of the content of the general school journals, including the "State" group, shows that the amount of professional material contributed by women writers increased quite steadily from 3 to 4 per cent of the annual output in 1850 to 15 or 16 per cent in the period of 1895-1899. This tabulation, of course, excluded news items, lists of examination questions, and other current general items.

The professional status of contributors showed a marked shift, corresponding of course to general changes in education. Occasionally a physician or lawyer wrote an article for a school journal or was quoted by one, but with few exceptions contributors may be listed in one of the four following groups:

- (1) Public school teachers, superintendents, and State school officers.
- (2) College and university professors.
- (3) Normal school teachers and principals.
- (4) Ministers.

The accompanying tabular comparison shows roughly the changed sources from which professional material came in the first and second parts of the period considered.

TABLE 4.—*Sources of the professional material.*

Sources.	1825-1855	1870-1900
	<i>Per cent.</i>	<i>Per cent.</i>
Public school teachers.....	27	31
College and university teachers.....	27	28
Normal school teachers.....	9	39
Ministers.....	36	2

It seems probable that the figure for ministers in the first column is too high, owing to the fact that many college teachers also used the minister's title.

To summarize the discussion of editorship, it may be said that State superintendents and commissioners were usually too fully occupied with other duties, enjoyed too short a term to become experienced as editors, and could not be free in their editorial attitudes because of the proprieties and connections of an official status; accordingly, when selected as editors it has usually been for financial or patronage reasons, discussed in Chapter III, rather than because of special fitness for the work. The State associations found it impossible to work out a successful plan of editorship, because of lack of cooperation and the difficulty

of satisfying their membership. Official, State association, or independent editorship of school journals has with few exceptions been a minor interest of busy men fully occupied in work to which an educational periodical constituted a more or less useful adjunct. To this fact must be attributed the character of much of the content, more fully described in Chapter VI.

Two of the editors who during several years made editing a school journal a principal means of gaining a livelihood, and whose publications for a time at least were entitled to first rank as to the character of content and extent of circulation, thus state some of their ideals:

So far as we know, we were the first¹ to make successfully the experiment of devoting the greater part of one's time to such an enterprise (editing a school journal.) We congratulate ourselves on the fact that the desire to be "spicy" and "sharp" has so seldom tempted us to indulge in personal criticism. These 2,500 pages (of editorial material) contain very few paragraphs which have injured anyone in feeling or reputation, while they abound in good words heartily written for hundreds of true and earnest workers.

The contents of a model school journal should be practical, sympathetic, inspiring. The practical rather than the theoretical has been my motto.² I have at all times welcomed free discussion of educational topics. No article was ever rejected simply on the ground that it advocated views at variance with those held by myself * * *. I am a firm believer in the method of elimination by substitution.³ It is far better to state correct principles than to find fault with existing methods. It is better to plan work than to say "don't."

The kindly spirit expressed in these quotations, with few exceptions, was characteristic. Rivalry between the New England Journal of Education and the short-lived Educational Weekly of Chicago occasioned a "war of the weeklies," and many unkind remarks grew out of the relations of the Educational Press Association, organized in 1895, to "promote fraternal feeling," mutual benefit, and united strength in advancing educational sentiment.⁴ Even to say unkind things requires a slight degree of courage, for such remarks may return; the difficulty with American educational periodicals editorially was much less in what was uttered than in what was left unsaid. Due to official and teachers association handicaps, or the necessity for careful handling of various commercial enterprises considered more important because less precarious in their income, positiveness and the inspiration of a strong personality were the elements most lacking in the editorship of typical school journals. Comparatively little was contributed by editors and that most diplomatically. This general statement admits of important exceptions, the editors just quoted being examples, and it is made in full view of the very real difficulties of the entire situation.

¹ E. E. White: Ohio Educational Monthly, 1875, XXIV, 147.

² W. A. Bell in Ind. Sch. Jour., 1893, XXXVIII, 5 (512).

³ Ibid, 1899, XLIV, 360.

⁴ Sch. Bulletin, 1895-96, XXII, 2.

Chapter V.

SPECIALIZATION OF CONTENT.

Before considering in detail the content of school journals as a class, a brief description will be given of the aims, content, character, and career of such periodicals as show marked variation from the usual type, or occupy highly specialized fields. The method employed in arriving at quantitative estimates of content is the same as that used in the study of the unspecialized group fully described in the next chapter.

Chronologically first among those sustained during a period of years and taking high rank in any comparison stands the American Journal of Education (1826-) continued in the American Annals. Many of the characteristic features of this periodical appear in all of the more serious works of its class. The subject which receives fullest discussion is foreign education; German, English, and French leading in the order named. The work of Pestalozzi and Fellenberg occupies the equivalent of a full volume of seven or eight hundred pages; monitorial and infant schools are important subjects in the earlier volumes. The tendency to gather information concerning education the world over, continued in Dr. Barnard's American Journal of Education, and later in the reports of the United States Commissioner of Education, showed itself in somewhat extended articles upon education in Algeria, Ceylon, Denmark, Greece, Holland, Iceland, Italy, Mexico, Norway, Russia, Sweden, and the South American countries.

Book reviews form the item of second importance, the editors and contributors being writers of textbooks in many cases. The reviews are usually long and seem to represent serious attempts at criticism. Material upon State and city systems is usually in the form of official reports. History of educational institutions, both local and foreign, also includes much quotation from original sources. Writings of Plato, Ascham, Bacon, and Locke are extensively quoted, the work of Vittorino da Feltre described, and biographies of Richter, Milton, and Cheever given. Other important subjects discussed are lyceums, female education, normal schools, agricultural education, manual labor schools, mechanics institutes, and the education of defectives. This series, in contrast to Dr. Barnard's journal, gave considerable space to current educational news, and there are more articles of a general nature, designed to promote an interest in public education.

The best-known contributors, aside from William Russell, W. C. Woodbridge, and William Alcott, who served as editors, were Carter, Gallaudet, Hall, Grimke, Gould Brown, Prescott, and Ticknor. Much of the Pestalozzian material was contributed by Mr. Woodbridge while in Europe, visiting especially the institutions of Fellenberg. A very great part of the content of the entire series was quoted, as has been noted, from official reports, and from the French Journal of Education, the London Journal of Education, and the writings of Pestalozzi, Jardine, Wilson, Wilderspin, Johnson, Jacotot, and Jullien.

In any study of educational periodicals the American Journal of Education (1855-1881) by Henry Barnard must be given a high rank. It is unique in character, most nearly comparable with the journal bearing the same name which has just been described. First projected in 1842, at the suspension of the Connecticut Common School Journal, it was designed to be an encyclopedia of education, with no prospect of becoming a popular work.¹ In 1850 Barnard endeavored to interest the American Association for the Advancement of Education in his plan of a central agency for diffusion of knowledge, part of whose work was to be the publication of a journal and library of education. Partly because of lack of funds, neither the American association nor the Smithsonian Institution, to which appeal had been made, could be practically interested in the proposal. Mr. Barnard then undertook the work himself, but after much copy had been prepared learned that Rev. Absalom Peters was entering upon a work of similar scope. The two united their efforts and issued the first two numbers under the title of the "American Journal of Education and College Review." Because of differing conceptions as to the nature of the undertaking, the two editors found it impossible to proceed with their joint efforts. Mr. Barnard continued his work under the name originally proposed, American Journal of Education.

Of the financial support accorded his undertaking the editor is quoted as follows:²

The first year's experience convinced me that but a very small proportion of those engaged in teaching either high or elementary schools, or in administering State or city systems, or of professed friends of popular education, would labor, spend, or even subscribe for a work of this character; and indeed that the regular subscription list would not meet the expense of printing and paper. But in the hope that the completed series would be regarded as a valuable contribution to the permanent educational literature of the country, I have gone forward, notwithstanding a formidable and increasing deficit.

The deficit remained and increased, but with remarkable devotion to his original purpose the editor continued his work, apparently regardless of the direct effect upon his private fortune. In all, 31 volumes were issued. The first series consisted of Volumes I-X, 1855-1861; the New Series of Volumes X-XVI, 1862-1866; the National Series, Volumes XVII-XXV, 1867-1875; and the International Series, Volumes XXVI-XXXI, 1876-1881. It may be remarked that there is much repetition in the later volumes, and that the first 25 include most of the valuable content.

In the study of this remarkable series volumes 18 and 29 are omitted, both being devoted almost entirely to statistics, general and educational. The two main lines of constant interest, each being represented in every volume except the two excluded, are history of education, including educational biography, and description of foreign school systems, conditions, and practices. One-third of the space of the entire series is occupied by historical studies. The teachings of educational theorists from Plato to Spencer and practically all the well-known educational classics now discussed or mentioned in standard histories of education are presented. Many of the historical articles are translations from the German works of Schmid, and especially Von Raumer, from whom thousands of pages are quoted. The biographies include most of the educational leaders in the early history of this country, from Ezekiel Cheever to the men who were prominent in 1870. The most extensive collection of these biographies is found in Volumes IV-VIII; combined they form material for a suggestive if not critical study of education in the United States from the Revolution to the Civil War.

¹ Am. J. of Ed., I, 921; XIX, 837.

² Barnard's Journal, 1860, VIII, 320.

The actual emphasis upon historical studies of education is much greater than is indicated by the statement as to space occupied, for almost every educational institution or movement is considered in its historical development. For example, a comprehensive sketch of all the State teachers' associations is given (XIV, XV), discussing their origin, growth, and present condition; a similar sketch of normal schools occupies a fourth of a volume (XVII). Discussions of foreign education, often historical, occupy one-fourth of all the space in this series, German, British, and French leading in the order named, but Holland, Canada, Sardinia, Norway, Sweden, Belgium, and Greece, as well as less important countries, not being forgotten. These studies derived their actual value from the fact that they were usually translations of standard works or of official reports. Reports of official visitors appointed to study various national systems of education, such as those of Cousin, Stowe, and Bache, are given much attention (Vols. VII, IX). Every phase of education in foreign countries was treated comprehensively by the publication in the same or succeeding volumes of all material which could be collected from all the countries bearing upon the subject under discussion, thus rendering comparisons possible. Examples which may be noted are the treatment of defectives (III, IV); technical schools (VII-X); military and naval schools (XII-XIV); universities (XXIV, XXV, XXVII, XXVIII).

The larger phases of State and national school administration are usually presented with a historical background. Method and management include a long series of extracts from a book for young teachers, model lessons from foreign schools, extended descriptions of the work of Pestalozzi, the Mayos and Wilderspin, and long quotations from Diesterweg's *Wegweiser*; of small devices and ready-to-use material there is little or none. School architecture is given a consistent treatment of several hundred pages; plans, measurements, and drawings being comprised in these articles. A description of playground apparatus (Vols. IX and X) is exceedingly complete, and the excellent accompanying illustrations, but for the dress of the children, might almost be taken for a representative approved equipment of the present day.

The entire content is high-class; less than 10 per cent of it is of the type which journals popular with teachers have made most prominent. Its circulation was always small, among practical teachers negligible, and there is little evidence of direct influence upon more extensively circulated school periodicals, except perhaps in the case of articles upon school architecture. Its influence was exercised through educational leaders; it became, as its editor designed, an encyclopedia of education, or a repository of such educational literature as had lasting value, and especially through its translations made first-hand acquaintance with influential European leaders possible. The following summary by D. C. Gilman characterizes its rank in educational literature:

It now comprises 24 octavo volumes, including in all some 20,000 pages, illustrated by 125 portraits and 800 cuts representing school buildings. Dr. Hodgson, a distinguished professor in the University of Edinburgh, has recently remarked that this publication "really contains, though not in continuous form, a history, and it may be said, an encyclopedia of education." It is the best and only general authority in respect to the progress of American education during the past century. It includes statistical data, personal reminiscences, historical sketches, educational biographies, descriptions of institutions, plans of buildings, reports, speeches, and legislative documents. * * * The comprehensiveness of this work, and its persistent publication under many adverse circumstances, at great expense by private and almost unsupported exertions, entitle the editor to the grateful recognition of all investigators of our systems of

instruction. He has won a European reputation by this journal, and in our country will always be an indispensable guide and companion to the historian of education.

The original plates of Dr. Barnard's complete works, in danger of being destroyed,¹ were saved by the formation of the Henry Barnard Publishing Co.,² of which Mr. C. W. Bardeen became the publishing agent; thus the American Journal of Education has been continued in print.

Growing importance of secondary education called into being several periodicals devoted wholly or in part to that field and the serious study of general educational problems. College Courant, a college and secondary school magazine, had been published from 1867 to 1874. Such publications were numerous in Germany, but "Education" (1880-)³ in announcing its aims, stated that there was no such journal in England or America, though a demand seemed to exist for such a review of education. The Academy (1886-1892), School and College (1892), and the School Review (1893-), form a series devoted to secondary education. The Educational Review (1891-), "a journal of the philosophy of education," and the Pedagogical Seminary (1891-), "an international record of educational literature, institutions, and progress," complete the list of periodicals established before 1900 which can fairly be grouped with the two earlier series just discussed and together be called "educational periodicals" perhaps, in contrast to "school journals," which is the name usually applied to the multitude of journals designed for more general circulation. Of the 700 or more periodicals devoted to education, this little group includes all which one may with confidence look for either in general or local libraries. No extended discussion of these will be given. The Pedagogical Seminary was highly specialized, devoting two-thirds of its space to scientific child study, contributed by teachers and students of Clark University, or quoted from foreign studies upon similar subjects. To the foregoing group might be added the Journal of Pedagogy (1887), but its content showed no uniformity of interests after the first few years of its career.

The following tabular analysis of content shows the principal fields to which the others of this group devoted attention. Aside from the specializing tendencies of those devoted to secondary education, and the greater emphasis upon principles and philosophy in their general content, the most conspicuous elements present in these, but absent from the usual school journal, were studies of foreign education and of the history of education.

TABLE 5.—*Character of the material in the school journals.*

Name of periodical.	Secondary education.	Foreign education.	History of education.	Various phases of education not previously included.	Current and miscellaneous.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
American Journal of Education, American Annals (1826-1839).....	3	24	7	43	23
American Journal of Education (Barnard) (1835-1881).....	2	27	32	36	3
Education (1880-1900).....	11	8	10	51	20
Academy (1886-1892).....	60	10	.....	17	4
Educational Review (1891-1900).....	12	7	13	64	4
School Review (1893-1899).....	53	6	10	28	3

¹ Ed. Rev., 1892, III, 409-410.

² W. S. Monroe's Ed., Labors of Henry Barnard, 29.

³ Education, I, 88-89.

TABLE 6.—*Method material according to high-school subjects.*

Name of periodical.	English.	History.	Latin-Greek.	Modern languages.	Mathematics.	Science.
American Journal of Education, Annals (1826-1839).....	<i>Per cent.</i> 5	<i>Per cent.</i> 22	<i>Per cent.</i> 63	<i>Per cent.</i> 10	<i>Per cent.</i>	<i>Per cent.</i>
Barnard's American Journal of Education (1853-1881).....	42	.....	34	.....	16	8
Education (1890-1899).....	48	12	20	4	4	10
The Academy (1896-1899).....	44	8	18	10	6	14
Educational Review (1891-1899).....	42	15	14	7	8	14
School Review (1893-1899).....	32	9	27	4	8	20

TABLE 7.—*Per cents of foreign studies devoted to English, French, and German education, respectively.*

Name of periodical.	English.	French.	German.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
American Journal and Annals (1826-1839).....	34	18	48
Barnard, American Journal of Education (1855-1881).....	40	17	43
Education (1890-1899).....	49	7	46
Academy (1896-1899).....	8	16	76
Educational Review (1891-1899).....	25	21	54
School Review (1893-1899).....	34	22	44

Two of the characteristic items in the content of these journals are their studies of high-school subjects and of foreign education. A table is given which indicates the comparative emphasis upon each of the high-school subjects, and another table shows the relative importance of studies of English, French, and German education in this group of periodicals.

Periodical substitutes for the school reader, while hardly to be classed as periodicals for teachers, often contained much material for teachers, and so merit brief notice, though no attempt is made to discuss them fully. It has been shown that the earliest school journals apparently developed from something much resembling children's papers, and at no time have the elements of children's papers been entirely absent. Papers for children and youth were early quite numerous in the United States; papers like the *Youths' Companion* and less successful publications of the same class were doubtless used in school, though not classed as school papers. As early at least as 1846 important efforts were made to provide such literature specifically devised for schoolroom use. The "*Student and Young Tutor, a Family Magazine and Monthly School Reader*,"¹ beginning in 1846, uniting with a similar publication called "*Schoolmate*," and continued as "*The Student and Schoolmate*," announced itself as "*A monthly reader for school and home instruction, containing original dialogues, speeches, biography, history, travels, poetry, music, science, anecdotes, problems, puzzles, etc.*" The editor deplored the scarcity of good oral readers, and suggested as a cause the necessity of reading over and over the same reading books, and cites the fact that when schoolbooks are changed a month of interesting reading follows. The use of story papers in class, it was said, usually resulted in disorder unless each pupil was supplied. The content of a typical volume² is sufficiently indicated in the quotation given, though the following subjects of "*original dialogues*" give a fairly good suggestion as to their character: "*The Study of History*," "*Getting Lessons by Heart*," "*The Schoolmaster in Search of a Situation*." About 25 pages of each volume are addressed to the teacher. This periodical had an extensive school circula-

¹ Vol. I, 2.² Vol. I.

tion during several years. N. A. Calkins and R. A. Phippin were its chief editors.

The *School Herald*, Chicago¹ (1881-1895?), devised for use as a school reader, devoted a tenth of its space to book reviews and declamations and the rest to current events, accompanied by questions and sometimes excellent devices to stimulate interest in their geographical and historical aspects. Another of the same class, "*School and Home*"² (St. Louis, 1884-1900), provided reading exercises according to the grades of the public school. This publication, as well as others of the same class, was more or less officially adopted by several school boards.³ The St. Louis city board contracted for 50,000 copies annually during several years, making the superintendent responsible for the character of advertising.⁴

The foregoing may serve to indicate the character of the better supplementary reader periodicals. All were illustrated, often abundantly and well. They seemed to meet a very real need, but difficulties concerning advertising, and the impossibility of furnishing good content in reasonable form at lowest prices, caused them to give place to other forms of supplementary reading.

The supplementary reader school journal in the large cities had something of the nature of a local school organ. Many local school papers have been conducted by superintendents and teachers of city schools. As a statement of the aims of these the following from the *Buffalo School Journal*⁵ is typical: "Devoted to the schools of Buffalo, to foster and extend feeling in favor of education, and a higher plane of intellectual culture * * * to be the medium between pupils and teachers." In the larger cities teachers and associations of teachers have conducted periodicals, with a large local circulation: "*The Teacher*"⁶ and "*School*"⁷ of New York may be cited as examples. In smaller cities the career of such publications was usually brief. The content of such journals varied widely; some in the large cities were excellent; usually in small cities they contained much "gossip" and unimportant material.

The first kindergarten periodical was the *Kindergarten Messenger*, established by Elizabeth Peabody, 1874. New *Education*, edited by W. N. Hallmann; the *American Kindergarten Magazine*, by Emily Coe; the *Kindergarten Magazine* ("*Kindergarten*") of Chicago, and the *Kindergarten Review*, published by the Milton Bradley Co., complete the list of kindergarten periodicals established before 1900. The second of these had as its purpose "Devoted to kindergarten culture and educational hygiene in home and school;" the fourth had as its motto "The kindergarten free to all children." The first two of these are characterized by the large amount of material directly from Froebel's writings. Considering the forty-odd volumes issued before 1900, kindergarten periodicals are in their content extremely if not narrowly true to their cause, no less than 80 per cent of their space being given to kindergarten interests. With one unimportant exception no other educational periodicals have been so completely specialized. W. N. Hallmann apparently wrote about half of the content of the little periodical which he edited; and Dr. Harris and others contributed several articles, but 90 per cent of the material was furnished by women writers; Elizabeth Peabody, Marie Krause-Boelte, Fr. Marienholz-Büllo, Lucy Wheelock, Emilie Poulson, Susan Blow, Mary D. Rogers, Amalie Hofer, and Alice Putnam being among the chief contributors. Many of the articles were well written, and while the kindergarten idea was new they were quoted in nearly all classes of school journals.

¹ *School Herald*, I-X.

² *School and Home*, I-XVI.

³ *Ibid.*, III, 13, 239, 1886.

⁴ *St. Louis City Sch. Rep.*, 1896-97, 25.

⁵ 1877, I, 4.

⁶ *The Teacher*, 1888-.

⁷ *School*, 1889-.

The first distinctively primary school journal was the *Primary Teacher*,¹ Boston, continued with slightly varying title. Its self-stated aim was to reach the most numerous and hard-working class of teachers with material not "over their heads." The field, it is stated, was unoccupied, a fact which is well confirmed by the enormous circulation of the method and device journals which developed in the same class, while the circulation gains of all other classes of school periodicals little more than kept pace with the increased number of teachers. Established later, but belonging to the same class, are the *Practical Teacher* (Chicago), *Educational Gazette* (Rochester), *Intelligence* (Chicago), *Normal Instructor*, *Primary School*, *Popular Educator*, and *Teachers' Institute*. Taken as a class in which individuals show considerable variation, these journals when analyzed show the following content:

	Per cent.
Method and device in common-school subjects.....	48
Exercises for special days, and stories.....	12
Questions, especially for examination.....	4
Various educational subjects not before included.....	18
Current and miscellaneous (not professional).....	18

With few exceptions reading is given most attention, followed by arithmetic, elementary science, drawing, geography, and language. Shifting emphasis was apparent; during the five years, 1895-1899, spelling and grammar received very little attention, while nature study perhaps occupied as much attention as any other three subjects, though much of what was written under that name could properly be classed elsewhere. A large part of the method and device material was entirely ready to use for "clipped" lessons, stencil drawings, elliptical sentences to be completed, lists of drill examples in arithmetic and ready-made busy work of great diversity of value. The presence of so much dissected and fragmentary material, it has been indicated, aroused no small degree of unfavorable notice from the older journals, which were not ready to recognize the use of such direct though often crude methods of aiding the common-school teacher; the chapter on circulation shows that those were the things apparently which teachers of children called for; and the study of content of the unspecialized journals shows that as a class all increased the amount of such material published.

Educational Notes and Queries (1875-1881), Salem, Ohio, modeled after an English publication of similar name, was not strictly a school journal, but its content represents very well the material found in the query departments of many of the school journals until quite recently. Arithmetic tending toward the catch question type, and grammar usually involving difficult or debatable syntactical points, form half of the content. Among the miscellaneous queries constituting the other half, the peculiar or wonderful, and phenomena or experiments involving elementary science principles, predominate. The following illustrations are typical both of this periodical and the query departments of others:

What is the possessive form of.....?
 The wind blows cold. Parse cold.
 I am free; he is not so. Parse so.
 Solve the following equation.....
 What animal walks on its head?
 Are geese asleep when they shut their eyes during a rainstorm?
 What is meant by Russian nihilism?
 What is the origin of *Hobson's choice*?
 A man was born in 1800. In what century was he born?
 What were the last words of.....?

¹ *Primary Teacher*, 1877, I, 1.

Several efforts to specialize in the interests of teachers of various subjects may be noted. For school music teachers the *Educational Herald and Musical Monthly* (1857), *School Music Journal* (1885), and the *School Music Monthly* (1900) for supervisors were conducted, the last still being published. The *Journal of School Geography* (1897), "devoted to the interests of the common-school teacher of geography," was highly specialized, its principal contributors being connected with the universities. The *Manual Training Magazine* (1899) in its earlier volumes gave approximately four-fifths of its attention to manual training. *Mind and Body* (1894) and the *American Physical Education Review* (1896), the former influenced strongly by German gymnastics, the latter giving much attention to athletics, were devoted to physical education.

The *Journal of Industrial Education* (1886), which gave considerable attention to manual training and household arts; the *Directors' Round Table* (1894), the *School Commissioner* (1892), and the *County Superintendent* (1899), unsupported because of the limited number of probable subscribers and "because county superintendents have never been in the habit of paying for school journals"; and the *School Laboratory* (1871), whose subscription list extended to "Oxford, Vienna, and Yokohama but with little density," all represent short-lived attempts to specialize in a field which soon proved too small. The *American School Board Journal* (1890) occupies approximately three-fourths of its space with matters of interest to school boards and superintendents; the remainder is filled with miscellaneous school subjects, school news, school cartoons, and a page of well-selected school anecdotes. The *Journal of School Physiology*, which began as "Scientific Temperance," contained little but material related to teaching the effect of the use of narcotics, and considerable controversial material upon the same subject. It later resumed its original name, which more truly represented its content. The *Child Study Monthly* (1895-) and the *Journal of Adolescence* (1900), the two later united, indicate clearly enough by their titles both their purpose and content as part of the child study movement. *Educational Foundations* (1889-) stated its purpose as "not a paper of methods and devices, not a newspaper, not a mere review of education," but designed to be "A textbook for the professional teacher, for normal school training classes, reading circles, teachers' institutes, and home study." Its content, in addition to the uniform questions of the New York State department of education, included extracts from many of the educational books used in the reading circles of various States.

The *Amerikanische Schulzeitung*¹ proposed to advance the interests of German language teaching and the welfare of German teachers, promote German methods of developmental teaching, and "To get rid of prison-like discipline, dry textbook instruction, insufficient salaries of teachers, and the foolish annual elections of the teaching force." A few other journals of restricted circulation were conducted to aid in teaching foreign languages, e. g., *Germania* (1889), *Etudiant* (1896-). *El Educador Popular* (1873-) was a typical school journal of the time, differing chiefly from others in being conducted in Spanish.

Between 1880 and 1900, especially in the Central Southern and Western States, a host of school papers were published by normal schools. These varied from mere advertising sheets and papers of the local college type to very effective teachers' periodicals. Most of those the writer has examined were made up chiefly of local or personal items, notes of school contests and "events," commencement addresses, "original" essays or stories by students, and other material of no professional significance. A few, however, specialized to meet the needs of former students, contained excellent articles usually written by

¹1873, IV, 8.

members of the teaching staff; these, circulated among students formerly in attendance, had increased probability at least of being read because of personal acquaintance with the author. No attempt has been made to list such periodicals, but several have been found which compare not unfavorably with their contemporaries among teachers' papers and doubtless for short times performed as good service. (As examples are cited: *Normal Journal*, Fort Scott, Kans., 1885; *Educational Extension*, Ypsilanti, 1897-1899.)

It may perhaps be worth while to discuss at this point certain features of German, French, and English educational periodicals as exhibited during the last 10 years of the century; a further treatment of the same subject is given in the chapter on circulation. The rigid distinction between types of schools in the first two of these countries led to earlier and more extensive specialization in the field of secondary education, about 15 journals being devoted to this work in Germany and half as many in France. Some of these were designed to promote the interests of certain types of schools, as *Das Humanistische Gymnasium* and *Zeitschrift für das Gymnasialwesen* for the Gymnasium; *Pädagogische Archiv* for the Realschule; *La Revue Internationale de l'Enseignement*; *Revue Universitaire* containing practical material for teachers in the Lycee and *L'Enseignement Secondaire des Jeunes Filles*. In England may be noted the *Educational Times* and *Journal of the College of Preceptors* and the *Preparatory School Review*.

In general the tendency to specialize according to subjects of the curriculum was most marked in Germany, there being not fewer than 20 such journals during this period. Some of these emphasized especially certain methods, as in the case of *Phonetische Studien*, by Dr. Vietor, which gave much attention to direct methods of teaching foreign language; others were occupied with more varied aspects of the subject of major interest; as the *Zeitschrift für Mathematische und Naturwissenschaftliche Unterricht*. In addition to such specializations there was a periodical devoted to school hygiene (*Archiv für Schulgesundheitspflege*); one for school inspectors (*Der Rektor*); several in the interest of the education of women and girls (e. g., *Zeitschrift für Weibliche Bildung*, *Die Mädchenschule*); one containing discussions of school law and its changes (*Schulgesetzsammlung*); one devoted to continuation schools (*Die Fortbildungsschule*); one to manual work for boys (*Knabenhandarbeit*); one to gymnastics and play (*Turn und Jugendspiel*); one to the training of teachers in normal schools (*Lehrerbildung*); besides a dozen representing as many other educational interests.

Official periodicals were important in Germany and France. Corresponding to the centralized administration, there were the *Bulletin Administratif* (France) and the *Zentralblatt für die gesamte Unterrichtsverwaltung* (Prussia), representing the ministers in control of education, for which of course no counterparts could be found in the United States. The *Revue Pédagogique*, sent to all who participated in administering elementary education in France, was the organ of the unique *Musée Pédagogique*, of Paris. Local official educational journals, "*Bulletins de l'Instruction Primaire*," containing news items, method suggestions, and official notes, were issued by the academy inspectors of France for each "department," the administrative unit; German official local journals issued under similar auspices were of like content.

Other striking features in the study of foreign educational periodicals are the large number devoted to religious instruction in Germany; the number in the same country occupied with scientific pedagogy, educational theory, and the history of education, 11 being mentioned by Lexis;¹ the prominence of volun-

¹ Lexis: *Unterrichtswesen*, Vol. III, 189.

tary organizations in maintaining school journals, especially in England; and the general fact that in spite of greater stability of such periodicals in some of these countries, very few have been published longer than have similar periodicals in the United States.

By way of summarizing this discussion of educational periodicals which depart radically from the usual type, it may be noted that a few in this country were conspicuous for their emphasis of serious studies of foreign schools, higher education, and the history of education; since 1880 method and device papers have been an important group; a few served exclusively the interests of the kindergarten; one devoted to school board affairs was able to maintain itself. In addition to these there were many interesting attempts at specialization in fields that were manifestly too small to admit of support. The numerous attempts at specialization of interests near the close of the century showed the tendency, manifested slightly earlier in Germany and to some extent in France, toward the development of an organ devoted to each school subject, each grade and type of school, and each department of the scientific study of education.

Chapter VI.

A STUDY OF CONTENT.

In order to determine the important elements, and the changes in content characteristic of unspecialized school journals, an extensive study was made of the "State group." The specialized, higher, and method and device periodicals have already been considered; the group classed as miscellaneous agrees in the main in its tendencies with contemporary journals of the local group. The method used in arriving at quantitative estimates of the division of content among various fields will be first described.

After examination of about 100 annual volumes representing widely separated periods and diverse interests, it was found that all subjects discussed in educational periodicals could be included under the classifications outlined and explained in the following:

1. Administration:
 - (a) National—Indian education, military, naval education.
 - (b) State and general.
 - (c) The State superintendents, laws.
 - (d) City.
 - (e) School boards.
 - (f) Compulsory attendance, attendance.
 - (g) Religion as a controversial matter in school affairs.
 - (h) School libraries.
 - (i) Textbooks—free, uniform, general except as to use in teaching.
2. Physical relations:
 - (a) School buildings, equipment, sites, decoration.
 - (b) School hygiene—ventilation, heating, lighting, school diseases.
 - (c) Play and playgrounds.
 - (d) Physical education, exercises, drills.
3. School management:
 - (a) General phases.
 - (b) Discipline.
 - (c) The recitation, questioning, examination, and study, as treated upon the plane of school management.
4. Grade method:
 - (a) General, including devices, "busy work," illustrative material.
 - (b) Arithmetic.
 - (c) Drawing.
 - (d) Geography.
 - (e) Grammar.
 - (f) Language.
 - (g) History.
 - (h) Music.
 - (i) Reading.
 - (j) Science, including nature study and physiology.
 - (k) Spelling, simplified or reformed spelling.
 - (l) Writing.
5. Moral and religious instruction:
 - (a) Moral lessons.
 - (b) Temperance instruction.
 - (c) The Bible and religion.
6. The high school (academies):
 - (a) General phases.
 - (b) English.
 - (c) History.

6. The high school (academies)—Continued.
 - (d) Latin and Greek.
 - (e) Modern languages.
 - (f) Mathematics.
 - (g) Science.
7. Foreign education:
 - (a) English.
 - (b) French.
 - (c) German.
 - (d) All others, including brief notices of the foregoing.
8. History or philosophy of education, psychology.
9. Minor classified educational topics.
 - (a) Coeducation, the education of women.
 - (b) Colleges and universities.
 - (c) The curriculum.
 - (d) Defectives, the blind, mutes, feeble-minded, incorrigibles.
 - (e) The education of Negroes.
 - (f) The kindergarten.
 - (g) Infant schools.
 - (h) The rural school, as specifically a problem.
 - (i) Teachers—
 - I. General topics.
 - II. Qualifications.
 - III. Examinations and certificates, except lists of questions.
 - IV. Salaries.
 - (j) Parents' relations to school.
 - (k) Normal schools.
 - (l) Manual or industrial, including manual training and all related to industrial education.
10. General unclassified material upon education. In this list fall a majority of "addresses," much material designed to promote an interest in schools, considerable reminiscently historical content, a priori discussions of the nature of men and the mind, brief quotations from educational philosophers, and such other productions dealing with education as do not lend themselves to the other classifications adopted.
11. Literary material ready for school use, including stories, supplementary reading, exercises for "special day" programs.
12. Questions and answers, including notes and queries, and examination questions.
13. Current educational news and notes:
 - (a) Scrappy book reviews and notices.
 - (b) Editorial news and comments.
 - (c) School news, including general "school intelligence," county notes, personals, and "gossip."
 - (d) Reports of associations—
 - (I) National.
 - (II) State.
 - (III) Others.
 - (e) Local institutes and reading circles.
14. Miscellaneous noneducational items including science notes, court events, brief biographies, jokes, poetry, "scraps," and space devoted to the promotion or discussion of the periodicals' own interests.

It is readily apparent that many articles could reasonably be placed in either of two divisions. The plan adopted with such material was to place it in the group which seemed to include its main purpose. Thus the few items concerning university athletics were placed under "college and university" rather than physical education, as they were usually presented as a college problem. "Teaching primary reading in a rural school" was placed under method rather than "rural school," since rural or urban setting usually had nothing to do with devices proposed. In such a study individual judgment with changing standards is involved to a considerable degree; in order to test the constancy of the divisions as used, many volumes were reclassified at intervals of several months and a year or more; in no important detail was variation apparent, which indicates that the subject divisions employed, whether the most logical

and scientific or not, were at least constant during the time devoted to the estimates.

The study of this group of periodicals involved examination of 700 annual volumes and a critical analysis of 500, from which 224 representative volumes were chosen for tabulation. In selecting these typical volumes great care was exercised to avoid the influence of local or temporary conditions and special editions. As illustrations of such modifying circumstances may be mentioned the near presence of a world's fair, the meeting of the National Education Association in a new State, or an editor in Europe. To eliminate minor tendencies, five-year periods were used, as in the study of circulation found in the next chapter. In counting space the octavo page was used as a unit, allowance being made for width of columns and size of types. A printed form which included principal topics was employed to facilitate the work; minor classifications were written for each volume and each article entered under its proper heading.

The accompanying table indicates by five-year periods the percentage of space given to each of the 14 main topics listed and explained earlier in this chapter. It may be noted that attention to general administration rather steadily declined in this class of periodicals as school systems achieved stability. It appears also that grade method and device and current news items relating to schools or teachers have increased until at the close of the period they constitute more than half of the total content. The space devoted to examination questions, and ready-prepared material for special days and supplementary reading also showed an increase. The four items just named include two-thirds of the content during the last five-year period.

TABLE 8.—*Contents of school journals of the State group, 1840-1899, by five-year periods.*

[The numbers following subjects refer to the paragraphs in succeeding pages which describe the content of each classification. For list of periodicals, see (b) of bibliography.]

Period.	Administration (1).	Physical relations (2).	School management (3).	Grade method (4).	Moral and religious instruction (5).	High schools (6).	Foreign education (7).	History of education, psychology (8).	Minor classified educational topics (9).	General unclassified educational material (10).	Literary material ready for school use (11).	Questions and answers (12).	Current educational news and notes (13).	Miscellaneous (non-professional) (14).
	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.	P. c.
1840-1844.....	40	3	6	13	1	.....	1	.....	5	16	1	1	4	7
1845-1849.....	18	2	7	11	3	.....	1	.....	10	17	4	.....	14	12
1850-1854.....	21	1	5	8	3	2	1	1	9	13	2	1	15	17
1855-1859.....	13	1	5	10	2	1	1	1	9	16	1	2	24	13
1860-1864.....	11	2	6	15	1	2	1	1	8	14	7	4	23	8
1865-1869.....	15	1	7	13	1	1	1	.....	9	12	1	2	29	8
1870-1874.....	14	1	5	13	1	5	1	1	12	11	.....	1	27	9
1875-1879.....	14	3	2	13	1	2	1	1	6	11	4	3	31	8
1880-1884.....	10	1	6	12	1	2	.....	1	8	13	.....	3	32	11
1885-1889.....	11	1	5	16	1	2	1	2	7	11	2	4	29	9
1890-1894.....	8	1	5	20	1	2	1	1	7	10	2	6	28	6
1895-1899.....	5	1	3	21	1	3	.....	3	4	9	3	6	30	6

Attention will now be given to the character of the material inside the different classifications.

1. ADMINISTRATION.

The United States as concerned with schools is chiefly represented by a few articles upon education of the Indians, military education, discussions concerning the Morrill Act, and occasional revivals of the national university project.

Four-fifths of this material relates to State laws and State administration, of which State school officers furnished a very large part. Arguments for free school systems and defense of systems in operation form a large part of the contents in the earlier periods, the work of school officers being creative as well as regulative. Since State departments of education have usually had most to do with rural and village schools, city administration is not an important element of content. Before 1850 reports of city systems in Massachusetts, New York, Pennsylvania, and Ohio constituted the bulk of such material; specific questions of the school board, compulsory education, books, and supplies received consideration, though never to a great extent. The problems of retardation, elimination, and the various defects of the graded system received increasing though limited attention from about 1870. Religion as a cause of controversy in school administration constituted one-fifth of 1 per cent of administrative material, or roughly claimed one ten-thousandth of the attention of readers of this class of journals and showed a decreasing tendency.

2. PHYSICAL RELATIONS.

Discussions of school architecture and school furniture occupy about half of the space devoted to external or physical conditions of education. "Model buildings" accompanied by plans and specifications are common since 1850. Physical education and school hygiene receive about equal attention, the former predominating until about 1870 and tending to disappear since that time. Overwork of school children is the subject of sporadic discussions from the first but shows a reflection of the serious studies of fatigue after 1880. One of the most widely quoted treatises upon any subject was the illustrated series of Dr. Dio Lewis, descriptive of calisthenic drills. The illustrations were excellent for the time and were unusual in that they showed how the drills were conducted. Between 1860 and 1870 these were used, in whole or in part, by practically every school journal published, and it is safe to assert that most of what was known by common-school teachers of that period concerning gymnastic exercises for schools came from this source.

3. SCHOOL MANAGEMENT.

School discipline is the subject of a third of all management discussions. Pupil self-government receives considerable attention as early as 1856 (Indiana School Journal I). Corporal punishment never entirely disappears; a favorite illustration or shocking example being the list of punishments invented or used by the "German Flogging Master" of the eighteenth century. This peculiar gem illustrates the tendency to use old files in seeking new content; it appears in all varieties of school journals since 1834 and has been repeatedly published since 1900.¹ "Motivation" was an important subject before 1880, being approached from the standpoint of "prizes" or "incentives." Management phases of questioning, the recitation, examination, and study became less important as method and device material increased.

4. GRADE METHOD.

In the periods before 1840 grade method had been represented by rather ponderous articles upon all the school subjects, leaning toward philosophy rather

¹ Levana, ch. 156, 793. The original is from Richter, who in turn quoted it from the twelfth quarterly number of *Pädagogische Unterhaltungen für Erzieher*.
Chamberlain: *The Child*, 286.

Bagley: *Classroom Management*, 125.

Hall: In *Pedagogical Seminary*, II, 82.

than device; by brief quotations from newspapers, and by material from Pestalozzi, Lancaster, Jacotet, and writers upon the infant school. The Pestalozzian content declined in importance very perceptibly until its revival in the Oswego movement and object teaching (1860-1880). N. A. Calkins' articles upon the use of objects in teaching were universally quoted. The changing nature of method and device articles is well stated by the following quotation from one of the ablest writers in that field:¹

As a rule the earlier papers on methods are general and indefinite, with few details, but here and there the reader finds a paper that opens wide windows into what is properly called a natural method of primary teaching—papers that show clear vision and practical knowledge. The more recent papers on methods abound in details, showing on their face that they are not mere theories but are delineations of actual school work.

As compared with earlier material, the greatly expanded method content of the last five-year period may be characterized as eclectic and pragmatic. The former method studies tended toward systems and were always endeavoring to find justification in some a priori principle; in the latter such concepts as "a system of object teaching," the "Grube number work," and the peculiarly uncommunicable principles of Col. Parker tended to disappear. Such logical abstractions after all had little to do with the immediate use of devices by untrained teachers, and it was for immediate utility that device material was created.

The accompanying table makes it possible to note the comparative emphasis in method discussions of common-school subjects, at different times and for the entire period. It may be observed that grammar and spelling showed a tendency to disappear and nature study to occupy an enormous amount of space during the last period. The civic phase of history, which received attention in the periodicals before 1840, increased steadily in importance from the first. Reformed, simplified, and phonetic spelling after 1830 are never long absent from the articles upon teaching spelling; a common lament at nearly all periods is that good spellers are less numerous than formerly.

TABLE 9.—Percentage of method discussion devoted to each common school subject in State group of school journals.¹

Period.	Arith- meti- c.	Draw- ing.	Geog- raphy.	Gram- mar.	Lang- uage.	His- tory.	Mus- ic.	Read- ing.	Spell- ing.	Sci- ence, nature study.	Writ- ing.
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
1840-1844...	5	12	10	26	1	1	5	19	12	1	8
1845-1849...	12	14	13	14	11	.....	3	16	13	2	2
1850-1854...	21	2	8	12	3	3	5	14	18	12	2
1855-1859...	12	2	8	23	8	1	5	19	14	5	3
1860-1864...	12	2	8	18	9	3	2	18	16	6	6
1865-1869...	12	3	19	10	3	4	0	14	6	18	2
1870-1874...	16	4	11	16	4	4	4	18	7	13	3
1875-1879...	14	5	3	16	12	4	2	19	15	9	1
1880-1884...	15	6	9	13	8	5	2	18	7	16	1
1885-1889...	20	5	8	4	12	11	-6	18	5	30	1
1890-1894...	17	2	11	7	12	12	2	20	6	8	3
1895-1899...	12	5	9	2	11	9	5	18	2	24	3
1900-1899...	14	6	9	10	9	6	4	18	8	12	3

¹ For list of journals see (b) of bibliography.

Elementary science lessons are given under various names, beginning with natural history, "lessons in common things," and culminating in the nebulous expansion of "nature study" during the last years of the period, during which,

¹ Ohio Ed. Monthly, 1884, XXXIII, 58.

owing to the prevalence of "correlation" ideas, no recognized line separated elementary science from mythology, fable, object lessons, or adventure stories. The undoubted value and recognition of science lessons for children in the elementary school has led to much effort from the first,¹ but results in this field were perhaps least satisfactory of any in the field of method. The poverty of material was indicated by the eagerness with which editors seized upon any clever or "catchy" articles bearing upon the subject. As an example may be mentioned a series by "Adam Stwin" upon "How Johnny burned himself without fire," and went through other experiences which taught him scientific laws. This first appeared in the "Christian Union," and was copied in half the school journals of the country (1870-1880). Aside from the earlier content lessons in physiology, mostly by Alcott, this subject received little attention except in connection with temperance lessons.

5. MORAL AND RELIGIOUS INSTRUCTION.

Much of the general material in the earlier journals is filled with pointed moral teaching; many stories are almost aggressively moralized. But discussions of specific moral instruction were inconspicuous and of decreasing importance after 1870; the same may be said of articles concerning the teaching of religion, or the Bible in public schools, which practically disappear after 1875. Brief notes upon temperance instruction appeared as early as 1830; nothing of importance is noted until about 1865, after which a few articles were published each year.

6. THE HIGH SCHOOL.

Among the discussions of high-school subjects, Latin and Greek received about as much attention as the combined sciences, mathematics, modern languages, and history, though English became the leading subject near the close of the period, followed by the combined sciences. General problems of the high school were discussed occasionally, but as the tabulation of content² indicates, the high school has never occupied much space in this class of periodicals.

7. FOREIGN EDUCATION.

Studies of foreign education at no time received much attention and practically disappeared before 1900. German, English, French indicate the proportion of discussion given to each of these countries, which is the same rank accorded to them in all other educational periodicals studied.

8. HISTORY OF EDUCATION AND PSYCHOLOGY.

Studies in the history of education or psychology and principles of education are given very little attention. Alcuin, perhaps because of his conundrum-like questions, is most often discussed. Socrates, Plato, Vittorino da Feltre, Ascham, Milton, Locke, Comenius, and Rousseau are quoted or briefly studied. Pestalozzi, Froebel, and Herbart are, of course, far more conspicuous, though there is not much direct discussion of their teachings in this class of periodicals. Local educational history is mostly confined to reminiscent studies, the "District School as It Was" being one of the best of this class. With few exceptions articles dealing with local educational history are hastily written and inaccurate. Psychology appeared in occasional articles upon precocity, individual differences, and phrenology. Much empirical psychology may be found in discussions of general educational topics; scientific psychology showed its influence in a considerable increase of "child study" articles after 1890.

¹ Mich. J. of Ed., 1838, 1.

9. MINOR CLASSIFIED EDUCATIONAL TOPICS.

The subject of coeducation, or the education of women, steadily declined in importance. The degree of change may be measured by stating that the casual reader, picking up the average school journal before 1875, had about 1 chance in 15 of opening at a page or article in which this subject was discussed, and considering the period since that time about 1 chance to 700. An equally pronounced decline occurred in the number of articles relating to parents, parental education, or the mutual duties of parents and teachers. After Page's essay upon "Parent and Teacher" had been very generally reprinted, it ceased to appear and nothing took its place. The education of defectives, important at first, gradually lost place and survived chiefly in discussions of well-known or unusual cases like that of Laura Bridgman. Monitorial and infant school education received practically no attention after 1845. The kindergarten received its first notices between 1855 and 1859, occupied increasing space while the idea was new, and as an important subject hardly appears after about 1890, though kindergarten principles were still discussed. The qualifications of teachers received great emphasis from 1840 to 1870, moral and personal qualities being stressed; since that time increasing attention to academic qualifications and professional training was evident. The interesting query, "Is teaching a profession?" was asked and answered by 20 of these periodicals between 1858 and 1885. Articles upon the course of study show demands for "practical education" at all periods, but serious studies of the curriculum were increasingly prominent after 1870.

The rural school as a specific problem received little differentiation of treatment until 1870. Literary and reminiscent material, like Rev. Warren Burton's *District School as It Was*, previously referred to, occasionally appeared and of course most of the content of this class of periodicals had about equal value for teachers of rural and of graded schools.¹ "Grading the rural school," courses of study and daily schedules for the country schools receive increasing attention beginning with about 1870. Manual or industrial education, except from 1880 to 1890, receives practically no discussion, and even during this period very little. There are sporadic suggestions that the school should teach sewing before 1860 and at that time the equipment of schools with machines was strongly advocated.²

10. GENERAL (UNCLASSIFIED) MATERIAL UPON EDUCATION.

Addresses by governors, college heads, presidents of teachers' associations, usually could not be classified in a single field; the same was true of many somewhat philosophical articles and speeches designed to demonstrate the need of public education. The following subjects of articles, many of them from the earliest period, indicate the nature of this material:

The Advantages of Knowledge.

Improvement of Common Schools.

I Know But I Can't Tell.

Whence Arises Aversion to Learning?

From Teachers' Guide and Parents' Assistant, 1826.

Political Importance of Education.

Self Improvement for Adults.

Popular and Liberal Education.

Errors in Common Education.

(American Annals and American J. of Educ. (1826-1832).)

¹ Ill. Teacher, 1870, XVI.

² New York Teacher, 18, IX, 60.

Education and Crime.
 Thoughts on Education.
 True Ends of Education.
 The Object of Education.
 The Education of a Free People.
 (District Sch. J. of New York, 1836.)

Universal Education, Popular Education.
 (Illinois Common Sch. Advocate, 1837.)

Influence of Education upon National Prosperity.
 What is Education?
 Speech of Daniel Webster on Education.
 (Illinois Common Sch. Advocate, 1841.)

The Twofold Object of Education.
 Why Educate?
 Thoughts on Popular Education.
 The Objects of Education.
 (Voice of Iowa, 1857.)

These are typical of the large amount of general material in journals of the pioneer period. Such articles in State school journals were often written by ministers for the community or State in which they were published. In these general articles upon education, which gradually lost their promoting and pioneering spirit, were many prize essays upon education, articles filled with good empirical psychology, and several educational classics such as Huntington's "Unconscious Tuition," quoted very generally (1860). In the association periodicals especially, there was much poor material, printed because the speaker was upon the program, rather than because editors or publishers thought it worth while.

11. LITERARY MATERIAL READY FOR SCHOOL USE.

Supplementary material in the form of selections for declamations, dialogues, "For Friday afternoon" collections and memory gems, was given variable amounts of space, tending to increase and become a regular department of many journals after 1890. School stories, sometimes continued through a long series, were numerous. Mr. Strap and Mr. Gosling (New York Teacher, 1854); the Pigwacket Rebellion, quoted from Holmes; Roderick Hume and Commissioner Hume by Mr. Bardeen (School Bulletin, IV, V); William Hawley Smith's "Walks and Talks" (Public School Journal, XII); and "Persimmons" (School News and Practical Educator, VIII), represent this type of material.

12. QUESTIONS AND ANSWERS.

"Notes and Queries," from which illustrations have been given, represents adequately the general question material of the first half of the period. Teachers' examination questions beginning about 1853 grew increasingly important and gradually superseded the more general queries. If local or State lists proved insufficient, there were the neighboring States; and the lists of New York could always be depended upon, when others failed, with the result that perhaps half of all printed material came from this source. From the standpoint of editorial economy, examination questions possessed a peculiar advantage, in that they could be (and were) republished several times, since none but the wary would notice the repetition.

13. CURRENT EDUCATIONAL NEWS AND NOTES.

Brief book reviews and briefer notices have from the beginning occupied about one-twelfth of the space of local school periodicals. Considering the ad-

vertising nature and lack of positive or critical character of most of these, it may well be doubted whether they, as a class, were worthy of the space given them, except in so far as they represent paid advertising. From 7 to 11 per cent of the space was given to reports of teachers' gatherings. During the period of the association journals most of this related to sessions of the State associations; the national association gradually received increasing notice; but the most prominent type of such material became, after 1870, the notes of county institutes, an important item of which in thousands of cases was the number of subscribers secured, or copies of the resolution in favor of "the journal."

School news items and notes, which until 1870 usually constituted less than 8 per cent of the content, increased until they averaged twice as large a share of space during the last 30 years of the century. Moreover, this material had become increasingly local and personal, amounting in many cases to the mere gossip which intelligent Europeans find so amusing in our local and village newspapers. A few examples chosen from State school journals of large circulation are given:

Mr. B—— will teach at —— this year. He will receive \$50 a month.

Mr. B—— is teaching a second year at ——. The board thought so well of his services that they added \$5 to his salary. Mr. B—— is a reader of the Journal.

Mr. B—— writes that he has six in his graduating class this year. He is a good teacher, and the Journal hopes his board will recognize the fact.

(I) —— continues in charge of the schools at ——.

(II) —— is superintendent of schools at ——.

(III) —— has been elected at ——.

The first of these by change of names occurs 8 times in one monthly number, the second 20, and the third 5 times in the same number:

On Aug. ———, Principal ———, of ———, married Miss ———, of ———, preceptress of the same school. A recent number of Xville Times contains an excellent picture and sketch of ———, who will remain at ———, though offered the principalship of ——— schools.

Mrs. B—— is a woman who does credit to her sex and the teaching profession. She is an ——— graduate and has been for some time the principal of the school at ———. This year her salary was raised to \$900 to prevent her seeking another field of labor.

Principal ——— remains at ———, although he is worthy of a much larger place.

—— will dispense with Supt. ———'s services after this term, and Miss ———'s salary has been reduced.

When such items occupied page after page, their value was certainly problematical. In a few cases editors apparently endeavored to work into print as many names of possible subscribers as space would permit. In view of the generally precarious support accorded such publications, this thrifty use of publicity may have helped financially, but the presence of almost innumerable empty or inflated "personals" undoubtedly injured the reputation of school journals as a class.

14. MISCELLANEOUS NONPROFESSIONAL MATERIAL.

Jokes collected by teachers have a school flavor; the same may be said of scientific intelligence, literary notes, and poetry selected for publication in a school journal. But for the most part all the material included in this classifi-

cation would be equally in place in an agricultural journal, a child's paper, or popular magazine. The meteorological reports common in earlier days persist occasionally until almost 1870. (*Minnesota Teacher*, II, 1868.) Excellent articles of general interest occasionally found their way into school journals, especially before they specialized to meet the professional wants of teachers.

Two or three attempts were made to combine the interests of the teacher with those of the farmer. The *Educator* (1838), which aspired to become a State periodical, gave exactly half of its space to a "terraceutical" department in which essays on "butter making" and "how to plant strawberries" were to interest the tiller of the soil, while the teacher, who boarded around and taught the children, or school officers, might read of Fellenberg's work or the relation of ignorance to crime. The *Michigan Journal of Education* of the same year contains articles upon agriculture, and "The School Journal and Vermont Agriculturist" represented both in name and content the same endeavor to provide material for farmers. Recipes for baking cakes and household hints are occasionally found as a department, though not given a prominent place (*Kansas Educational Journal*, 1864, I). With the exception of such attempts, few in number, to appeal to specific groups and interests, the miscellaneous material consisted of semiscientific articles descriptive of the rare and curious, of brief scientific notes, occasional literary intelligence, news of current events, reports of temperance societies, stoical maxims, proverbs, last words of famous men, and various scraps of cleverness gleaned from general literature. "Letters from Europe," containing only personal gossip or experience, and histories of various States, "by the editor," were sometimes given considerable prominence. As has just been remarked, the better types of miscellaneous articles showed a tendency to disappear; the unrelated and fragmentary content continued.

Poetry (verse) formed a definite, if not very large part of this miscellaneous content. The earliest educational periodical contains "To Education," "The Old Oaken Bucket," and an "Ode to Terror."¹ Much of the verse was original and sometimes brought into what seems rather unexpected professional service. A resolution of the New York State Teachers' Association was in verse, 1845;² an address of 12 pages length was read at a county association in Massachusetts (1858), of which the following are representative lines:³

You who will listen to my rhymes to-night,
May vainly hope for some poetic flight!
No poet I; the "faculty divine"
Has never been and never will be mine.

Just as I saw her, when on lowly stool
I sat before the mistress of our school,
I see her now; for through the mists of years,
That awful vision of the past appears!
In years well-stricken; lame, but not so much
But she into a cane could turn her crutch,
Which o'er the victim's cranium she laid
In hopes to beat some knowledge in his head.
With a long nose, hooked like a vulture's beak
Thin, pursed-up lips, and chin of sharpest peak,
And eyes for idlers ever on the seek.
With rod beside her—tickler for dull wits,
Terror of trembling pupils—there she sits.

¹ *Academician*, 1818.

² *Teachers' Advocate*, 1845, I, 19

³ *Mass. Teacher*, VIII, 65. —

Further insight into the character of such verse may be gained from the following examples:¹

Friends of learning, love and labor,
Friends of knowledge, truth and freedom,
Would you do mankind a favor,
Would you live by virtue's rules,
Would you seek to foster wisdom,
Then rally round the public schools.

The district school is often taught,
By some stern, robust man,
Who thinks all virtue must be sought,
In his coercive plan;
Who, like a power none can evade,
Would but command and be obeyed.²

And thus "to rule" consumes the day,
"To learn" receives the second thought.
The scholars from restraint, obey
The teacher's code, but love him not.
And should he stay a 12-month through,
They almost welcome his adieu.

The subjects of other selections are:

Song of the Delaware County Institute.
Farewell Ode of the Delaware County Institute.
The Sabbath Bell.
The Rainbow.
No Time for Dying.
(Teachers' Advocate, 1845.)

The Teachers' Record.
The Dying Teacher.
The New York Teacher.
(New York Teacher, 1854.)

"Smile, When You Can."
"Do Take the Old School House Away."
(Arkansas Journal of Education, 1872.)

The original and pedagogical verse period passed among most journals before the close of the Civil War, and by far the most of that published at any time had literary rather than professional characteristics.

The 2 per cent of their space which school journals have devoted to themselves is classed as miscellaneous, since it is not educational. The character of this material has changed with that of the status of the periodicals. While closely connected with the teachers' associations pleas for better support of the official organ, long statements of aims and financial condition, editorial difficulties of committees not in agreement, and favorable comment from exchanges form the bulk of the self-related content. Self reference in the more recent period was usually confined to favorable resolutions of county institutes, letters from subscribers telling what benefit they had derived from reading the periodical or expressing unwillingness to miss a single issue, and exhortations to subscribe or pay subscriptions. School journals as a class have been accused of too much self-discussion, perhaps a just charge to which there are exceptions. It is probable, too, that discussions of internal ideals and troubles of the earlier days, necessary as they sometimes were, had no better effect upon the esteem in which these papers were held than the more direct and scrappily presented pleas and self-directed praise of more recent times.

¹ N. Y. Teacher, 1856, V, 301.

² Ibid, 86.

In the foregoing the endeavor has been to show the character of content and changes in its nature. The great evolution has been toward specialization upon affairs of the schoolroom and school news tending strongly in the direction of the personal and unimportant. Reading of some hundreds of annual volumes shows of course much material of poor quality, hastily written, and dogmatically expressed. It shows also very earnest, serious, and well-directed efforts to solve most of the problems upon which educators are still engaged. The impression which grows strong as one reads extensively is well characterized by E. E. White in "A Few Hours with Educational Journals."¹

Those who suppose that any method of primary instruction has been evolved and perfected within the past 15 or 20 years are commended to the pages of the educational journals. Here they will find evidence that what they suppose to be a very recent discovery is very much older than the supposed discoverers—older not merely as a theory but as a method successfully used in many schools. An acquaintance with the literature of education would open the eyes of many of the most ardent advocates of the "New Education" (whatever this may mean). This is illustrated by the "new" idea of teaching spelling without a spelling book, which was both advocated and opposed as a Quincy idea.

The writer then says he could name a score of cities where the "no book" plan had been in use for 20 years or more, especially in the lower grades. A few illustrations of measures early advocated will be given. Some of these in a peculiar degree show the tendency to be rediscovered and proclaimed as new; among such may be noted the fear that children will be overworked and the accompanying proposal that home study should be abolished, discussed in the *American Annals*,² 1837; the use of newspapers in schools advocated in 1837, 1840,³ 1859,⁴ 1867,⁵ 1870,⁶ and discovered or invented as a good device many times since; the problem method of securing proper motivation by making children's lessons an outgrowth of home environment and activity, described in a series of model lessons before 1840.⁷ Compulsory education in the Mississippi Valley was discussed in 1837;⁸ a thoroughgoing school survey was outlined 1846;⁹ and a system of rural school consolidation with central intermediate and high schools was completely worked out with charts and arguments, 1857.¹⁰ The constancy of the educational problem is also indicated by negative criticisms of schools.¹¹ Principal defects named before 1840 were poor teachers with short tenure; little apparatus for teaching purposes; the overcrowded curriculum and the fact that the education of the 5 per cent who continued in school beyond the elementary stage was unduly influential in determining what the other 95 per cent should study, thus resulting in an "Impractical" training for the majority. These remained important elements of unfavorable comment and of course, for most sections of the country, still form the basis of many valid criticisms of schools.

¹ E. E. White, *Ohio Ed. Monthly*, 1884, XXXIII, 58.

² *Am. Annals*, 1837.

³ *Dist. Sch. Jr.*, 1840.

⁴ *Southern Teacher*, 1859.

⁵ *Ill. Teacher*, 1867.

⁶ *Ed. Jl. of Va.*, 1870.

⁷ *School Master and Advocate*, 1836, I, 30-100.

⁸ *Ill. Com. Sch. Adv.*, I.

⁹ *Jl. of R. I. Institute*, I, 1x84.

¹⁰ *R. I. Ed. Mag.*, I.

¹¹ *Pa. Sch. J.*, V, 50.

Chapter VII.

A STUDY OF CIRCULATION.

The principal source of information concerning circulation before 1870 is internal evidence in the form of editorial statements; publishers' and editors' reports presented to State teachers' associations; official documents and State laws in the case of those supported or subsidized by the State; and occasional comments by persons variously responsible for financial matters connected with these periodicals.

It has already been shown that the earlier journals were devised quite as much for school committees as for teachers; the references cited also indicate that these officers frequently manifested little interest, even when such papers cost them nothing. The *Maine Journal of Education*¹ states that "there is little to hope from school committees, from the fact that a pretty large part of them are, on the subject of education, as dead men," and because "what is everybody's business is nobody's." Occasional quotations like the preceding may be regarded as evidence that circulation among school officers was not looked upon as very promising from the first; and when appeal was made to teachers to subscribe, the response was often so meager as to cause a later writer to declare that the educational journal is an orphan, since ordinary teachers were "too indifferent to support it, teachers of a higher grade were too conceited to support it, and great educators expected to get it for nothing." The *Vermont School Journal*,² in explaining why educational journals are not read, thus characterized the attitude of most teachers: "Most country teachers suppose themselves well furnished for this work if they pass an examination and receive their certificates." Since they are not better esteemed in the community for studying, "they think it better to knit or study law; meanwhile they have no conception of what a school might become." The *Common School Journal of Massachusetts*³ went, for the most part, to private schools and clergymen rather than to teachers in public schools; the *Massachusetts Teacher*⁴ was subscribed for by less than one-fourth of the teachers, and the same journal⁵ cites the case of a meeting of 70 teachers not one of whom subscribed for any journal. The *Michigan Journal of Education*⁶ (1854) says that it would be prosperous if a third of the teachers of that State were its subscribers. In the "best" Wisconsin county in 1861 a third of the teachers were subscribers to the State organ.⁷ Contrary to the usual complaints of indifference among common-school teachers, the editor of *Southern School of Georgia*⁸ says that his best support comes from the "old field" teachers, while not one-tenth of the "professors" ever read his paper. It is stated that, of 21,000 teachers in Ohio (1863), about 18,000 never looked at the *Ohio Educational Monthly*,⁹ which was practically equivalent to saying they read no school jour-

¹ 1850, I, 52.

² *Vt. Sch. J.*, 1863, V, 67.

³ *Common Sch. J.*, 1845, VII, 1, 2.

⁴ *Mass. Teacher*, 1855, VIII, 353.

⁵ *Ibid.*, XXI, 457.

⁶ *Mich. J. of Ed.*, I, 332.

⁷ *Wis. J. of Ed.*, VI, 387.

⁸ *So. Sch. of Ga.*, 1858, I, 185.

⁹ *Ohio Ed. Mo.*, 1863, XII, 122.

nals, owing to the fact, to which abundant testimony is given, that the "State" journals had little circulation except in the State where they were published and that there were no other journals of any considerable circulation at this time.

Considering, along with a very great number of such bits of evidence, the general situation and the character of the content of early State journals, it is the opinion of the writer that in reply to the question "Who read these school journals?" the answer should be in most cases, at least until the State associations relinquished all but a nominal control, that the circulation among teachers, relatively small, included preeminently those leaders who attended the associations, read addresses, and were active in such meetings, and who thus had a peculiar interest in the published proceedings, which occupied so large a space in this class of publications. To these as directly connected with the meeting of the association should be added such teachers of the local community as came under the spell of the State gathering for a year, and then forgot to renew subscriptions when the meeting of the teachers was held in some other part of the State. The teacher who stayed at home, if he considered the matter at all, weighed the school journal in terms of its practical relation to his daily work, found little he could use and so did not subscribe. And if, at the solicitation of some enthusiastic teacher or State agent, he subscribed, there was less than one chance in three that his subscription would be renewed at its expiration.¹ The remarkable fluctuations of circulation, according to lists giving subscribers by counties, reflect the shifting and transient nature of the teaching population, and indicate as well that subscribing for a school journal showed much the character of a revival following in the wake of the State meeting of teachers, visits of the State agent, or some other agitating force. Not regarded as a necessary part of professional equipment of the teacher whose professional career was very short, it is easy to see why renewals could not be depended upon. Proof of the unfavorable effect of State subsidies upon circulation among teachers has already been given.

From such statements as those just quoted, and from the newspaper directories since 1860, the circulation tables given in this chapter have been prepared. The statistics of the number of teachers were taken from the reports of State superintendents prior to 1870, and from the reports of the United States Commissioner of Education after that time. As none of these sources is unassailable from the standpoint of reliability, the method of using such data will be briefly explained.

In estimating the value of a circulation report, the circumstances under which it was given have been considered. A retiring resident editor in making a report to the State teachers' association would be less willing to report a decrease of circulation during the period of his control than an increase. Likewise in making any statement of circulation at the time he took charge, there would be no incentive for giving higher than the actual figures. In case of essential disagreement between newspaper directories, the lower figure has been taken except in a few cases where there were excellent reasons for varying this method of procedure, since the tendency in reporting circulation to a directory would be to overestimate in case of doubt, to report special editions rather than average issues, or to allow seasonal fluctuations to exercise undue influence. As in the study of content, five-year periods have been used; it is believed that the average circulation during a five-year period is a much more reliable indication of actual tendencies than any single-year estimates could be, since it is possible to eliminate erratic figures by using for the five-year period the average

¹ Pa. Sch. J., 1862, X, 355.

of what appear more likely to be accurate reports; or if the unusual (and probably untrue) statement is used, the error resulting is reduced when spread over a five-year period. It may thus be seen that annual circulation figures used in the tables are in few cases those given for any single year in the directories or published reports, but may be verified by finding averages for the five-year period.

A similar method was followed in determining approximately the number of teachers in each State, with the same advantages in the use of five-year periods. The report of the United States Commissioner of Education for 1886-87 gives the number of teachers in Maine as 2,801, although for many years preceding this date the number reported is never less than 5,000, and for the succeeding five years is always 7,000 or more. All such errors are eliminated in considering five-year periods.

A few sources of unavoidable inaccuracy should be noted. In many State documents and in the data furnished to the United States Commissioner, the number of teachers in "winter" and in "summer" is reported separately or added and reported together; except in cases of reports which also give the lists according to sex, it is not possible to determine how many are reported twice. Partly compensating for this error is the fact that teachers in private schools are usually not reported. In spite of this and the attempts at correction by several State superintendents, the number of teachers reported is probably too large, though tending toward correctness after 1890. The writer also believes that the circulation figures are too high. In no absolute sense can the items of the circulation tables be regarded as accurate, for the most logically derived averages of inaccurate data are still inaccurate. The factors causing whatever inaccuracy there may be were, however, always present in some degree, and it is believed that the tables represent the general tendencies truly, which is all that is claimed for them.

In all tables, periodicals not continued longer than one year have been omitted, except those for which reliable data could be obtained. The total amount of circulation thus omitted is insignificant. As previously noted, county school journals and supplementary reading papers for "teachers and children" are also omitted.

In considering the tables of circulation, a clear distinction should be made between "circulation," which usually meant the entire number of copies printed, and "subscribers," frequently a very much smaller number. The following illustrate extreme cases of the difference between circulation and subscription:

TABLE 10.—*Circulation of periodicals.*

Name of periodical.	Year.	Circulation.	Subscribers.
Connecticut Common School Journal.....	1840	1,500	392
Ohio School Journal.....	1853	1,900	1,200
Illinois Teacher.....	1856	2,364	403
California Teacher.....	1864	1,700	650

Part of such discrepancies is accounted for by the fact that until 1875 exchanges were given free postage and exchange lists often included a large part of the local press of the State as well as all the school journals of the country.¹ The Illinois Teacher,² perhaps typical, had 230 exchanges during its second

¹ North: History and Present Condition of the Press, 186.

² Ill. Teacher, 1856, II, 376.

year; the *California Teacher* (1865)¹ had 200. The free exchange list shrank after the change in postal laws,² but as advertising increased in importance, ways remained, in spite of stricter laws, of keeping gross circulation considerably in advance of the number of actual subscribers.

A further distinction should be made between subscribers and paying subscribers. Delinquency was very general at all times, perhaps most troublesome in the early period, and increasing with every financial disturbance and of course not confined to this class of periodicals. *Niles Weekly Register*³ had set the encouraging example of acquiring a delinquent indebtedness of ten or twelve thousand dollars in less than two years. The *American Annals*,⁴ with its usual dignity states on the last page of its closing issue that "the number whose subscription is due is very large." More than half the subscriptions to the *Connecticut Common School Manual*⁵ were unpaid at the close of its second number. The *Massachusetts Common School Journal*⁶ complains (1850) that many are slow in paying and many never pay at all; a year later it suspended, alleging delinquents as the cause of its failure, and disposing of its uncollected bills for half their face value. Of the third volume of the *Iowa Instructor*,⁷ 700 copies were circulated; 200 of these were exchanged or donated; of the remaining 500, about half were not paid for. The *Massachusetts Teacher*⁸ estimated its annual loss from delinquent subscribers at from \$500 to \$800. These illustrations, chosen mostly from the first half of the period, doubtless represent extreme cases. Of course delinquent subscribers continued to be the bane of publishers, but with the increased value of advertising and changes in postal laws, loss from this source became less important.

Table 11 needs little explanation. A word should be offered concerning the ratios given in connection with circulation. To say that the gross annual circulation of all school journals in the period 1855-1859 was equal to twenty-two hundredths of the number of teachers does not mean that 22 per cent of the teachers were subscribers. From what has been said previously it is probable that not more than half of the copies circulated went to teachers at this time. With each succeeding period, however, these ratios more nearly indicate the percentage of teachers who were subscribers, and after 1880 the number of subscribers other than teachers was insignificant. Making allowances for the facts that teachers probably read copies sent to school officers, and for the general factors of exchanges, and of uncirculated copies, the ratios may be taken as fairly indicative of the extent to which teachers made use of school journals at different periods. It should be noted that not until some time between 1885 and 1890 was the gross annual circulation of all school journals combined equal to the numbers of teachers in the country. It should also be remarked that the method-device papers and the miscellaneous group, for the most part of similar content, constituted three-fourths of the circulation at the close of the century.

During every 10-year period from 1850 to 1890 the increase of circulation of school journals showed a much greater ratio over that of the preceding period than did the general circulation of all newspapers and periodicals combined.⁹ During the last 10-year period of the century,¹⁰ in common with nearly all class

¹ *Calif. Teacher*, 1865, III, 69.

² North: 54, 136, 146.

³ *Niles Wkly. Reg.*, 1813, IV, 290.

⁴ *Am. Annals*, 1839.

⁵ *Conn. Common Sch. Manual*, 1848, II, 265.

⁶ *Mass. Common Sch. J.*, 1850, XIII, 327, xiv, 38.

⁷ *Iowa Instr.*, 1862, IV, 58.

⁸ *Mass. Teacher*, 1870, XXXIII, 400.

⁹ Cf. Hudson: *Journalism in U. S.*, 772.

¹⁰ U. S. Census Rep., 1900, Vol. IX, part II, pp. 1040-1043, 1044.

journals and specialized journals as a class, there was a marked decline in proportionate growth. This, aside from its evident emphasis upon daily newspaper circulation, may be interpreted to mean that school journals, beginning as a specialization in an unoccupied and growing field, had gradually expanded until quantitatively this field was preempted. If this be true, subsequent development will probably be found to keep pace quantitatively with increase of the teaching population, and qualitative adjustments may be looked for rather than any such rapid expansion of circulation as characterized the period from 1870 to 1900.

TABLE 11.—*Total annual circulation of educational periodicals, 1840-1899.*

Five-year periods.	Teachers in the United States.	Local (State) journals.		Method papers.	Higher education, scientific study of education.	Minor specialized interests.	Other school journals.	Gross circulation.	
		Average circulation.	Ratio of circulation to number of teachers.					Total.	Ratio to number of teachers.
			<i>Per ct.</i>						<i>Per ct.</i>
1840-1844		12,400					1,000	13,400	
1845-1849		14,000					11,300	25,300	
1850-1854		9,500	8				1,600	11,000	9
1855-1859		27,200	19		1,500		4,000	31,700	22
1860-1864		14,500	9		1,600		1,000	16,100	10
1865-1869		24,400	13		1,600		27,500	52,500	22
1870-1874		37,800	16		1,000		49,500	87,300	38
1875-1879		25,600	10		1,100	500	57,400	84,400	32
1880-1884		42,900	4	32,800	2,900	4,800	81,000	165,100	56
1885-1889		67,600	20	97,200	3,800	7,000	128,200	301,800	87
1890-1894		89,800	24	217,800	12,100	16,800	186,900	523,200	137
1895-1899		122,800	30	352,600	11,500	29,900	199,800	716,600	177

¹ In these periods it was necessary to estimate the number of teachers in a few States where official reports were lacking.

² Estimates.

Table 12 is a more accurate measure of the circulation of the State school journal group, since it includes only the States in which such periodicals were conducted. It may be seen that the great increase of gross circulation of all school journals indicated in Table 11 is but slightly due to this class of local publications. As several of this group showed a tendency to decline during the last five-year period, the circulation of such as were still published in 1915 was noted. Their gross circulation showed a slight increase, but as compared with the number of teachers, a decrease. A few comparisons of the circulation of school journals in the United States with those of other countries may contribute to an understanding of the situation. Germany, as a group of States, each having its own school system, offers the best field for a comparative study, though the official character of many German periodicals, the strict divisions between different classes of schools and the importance of religion in the curriculum make close comparison impossible. It should also be remembered that names are subject to interpretation, and as a consequence periodicals falling into the same general group may nevertheless represent rather unlike purposes and content. In securing all data concerning foreign periodicals, the plan of using reports extending over periods of several years was employed, though in Germany and France at least much less variation from year to year seems to exist than in the case of American school journals.

TABLE 12.—*Circulation of local (State) school journals, 1850-1899.*^a

Five-year periods.	Number of States.	Number of teachers.	Circulation.		States included.
			Total.	Ratio to number of teachers.	
1850-1854....	6	55,800	9,500	17	Conn., Mass., N. Y., Ohio, Pa., Wis.
1855-1859....	12	95,479	26,200	27	Conn., Ga., Ill., Ind., Mass., Mich., N. H., N. Y., Ohio, Pa., R. I., Wis.
1860-1864....	8	73,800	15,700	21	Conn., Ill., Ind., Iowa, Mass., N. Y., Pa., R. I.
1865-1869....	11	98,000	24,400	25	Calif., Ill., Ind., Iowa, Kans., Me., Mass., Mich., Ohio, Pa., R. I.
1870-1874....	16	157,300	37,800	24	Ark., Calif., Conn., Ill., Ind., Iowa, Kans., Me., Mass., Mich., Minn., N. Y., Ohio, Pa., R. I., Va.
1875-1879....	10	124,600	25,600	21	Calif., Ind., Iowa, Ky., Md., N. Y., Ohio, Pa., Tenn., Va.
1880-1884....	19	209,600	42,900	20	Ark., Calif., Ill., Ind., Iowa, Kans., Ky., La., Mich., Minn., N. Y., N. C., Ohio, Pa., Tenn., Tex., Va., W. Va., Wis.
1885-1889....	24	272,900	67,100	25	Ala., Calif., Colo., Ga., Ill., Ind., Iowa, Kans., Ky., La., Mich., Minn., Mo., N. Y., N. C., Ohio, Pa., S. C., S. Dak., Tenn., Tex., Va., W. Va., Wis.
1890-1894....	25	275,600	72,400	26	Ala., Ark., Calif., Colo., Fla., Ga., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., N. Y., N. Dak., Ohio, Okla., Pa., S. Dak., Tenn., Tex., Va., Wash., W. Va., Wis.
1895-1899....	27	307,800	94,800	31	Ala., Ark., Calif., Colo., Fla., Ga., Ind., Iowa, Kans., Ky., Mich., Minn., Miss., Mo., N. Y., N. Dak., Ohio, Okla., Pa., S. C., S. Dak., Tenn., Tex., Va., Wash., W. Va., Wis.

^a Including only States in which these were published.^b Illinois is omitted, 1890-1900, because the two periodicals devoted to State interests circulated to a considerable degree in other States.

From Table 14 it may be noted that the per cent of German local periodicals is large, that the entire number of school journals is larger than in the United States, and that the majority of all classes have a small circulation. Aside from the presence in the German list of periodicals devoted to religion and the larger number concerned with higher education, the most notable feature of the comparison is the almost entire absence in Germany of method-device papers, which account for most of those having large circulation in the United States. It has been suggested that the well-trained teachers of Germany do not need such "helps." This seems a reasonable inference, but would need for complete proof a careful study showing that untrained or poorly trained teachers in this country furnished the only market for these papers.

To make possible a more direct comparison of German and American periodicals the statistics of gross circulation are given for the five-year period, 1895-1899.

TABLE 13.—*Total circulation of German periodicals for teachers, 1895-1899.*

Local (State or Province).....	109,800
Miscellaneous, for the most part not highly specialized.....	71,600
Specialized, representing various minor interests.....	6,100
Religious, confessional interests.....	31,100
Higher education—study of education.....	20,800
Total.....	239,400

TABLE 14.—*Character of school periodicals in the United States and Germany, as measured by gross annual circulation, five-year period, 1895-1899.*

Gross circulation.	Local.		Method.		Higher education, studies of education.		Minor specialized interests.		Religion.		Other school journals.		Total.	
	U. S.	Ger.	U. S.	Ger.	U. S.	Ger.	U. S.	Ger.	U. S.	Ger.	U. S.	Ger.	U. S.	Ger.
Less than 1,000.....	2	38	.....	.....	.....	16	.....	6	.....	2	3	3	5	65
1,000-1,999.....	9	19	.....	.....	.....	1	5	.....	1	.....	7	3	14	13
2,000-2,999.....	4	11	.....	.....	.....	2	2	.....	2	.....	2	6	8	14
3,000-3,999.....	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	4	8
4,000-4,999.....	4	1	.....	.....	.....	.....	1	.....	.....	.....	.....	5	1	10
5,000-9,999.....	7	2	.....	.....	.....	1	.....	2	.....	.....	.....	6	1	16
10,000-19,999.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	6	10
More than 20,000.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....
Total.....	30	76	9	.....	4	23	5	7	.....	13	36	31	84	150

The number of teachers in Germany for the same period was approximately 163,000. The ratio of gross circulation to the number of teachers was thus 147 to 100 (122 to 100 if religious periodicals are omitted), as compared with 177 to 100 for the United States (Table 14), indicating a somewhat less general circulation of such papers than in the United States. It has already been shown that this difference is more than fully accounted for by the prevalence of method-device papers in this country. Frequency of issue must be considered in interpreting estimates of circulation. In this there has been little variation; at least 95 per cent of all school journals established in the United States have been issued monthly, very often during 10 months or the "school year." Horace Mann's Common School Journal and a few others have been published semi-monthly; Barnard's American Journal of Education, irregularly issued, usually appeared four or five times a year, and others of limited circulation could be named which were issued less often than 10 times annually. Of weeklies there have been few, the most worthy of note being the School Journal of New York (1871-); New England Journal of Education (1875-); the Educational Weekly of Chicago (1877-1881); the Educational Weekly of Indianapolis (1883-1885); and the Educational News of Pennsylvania (published weekly at different places, 1885-1898). Only four of importance were published during the last five-year period of the century; two were semimonthly, two were quarterly or bimonthly, and about 80, including all the rest of any significance, were monthly. At the same time there were in Germany 3 daily, about 50 weekly, 30 semi-monthly, 50 monthly, and 15 quarterly or bimonthly educational periodicals. Both France and England also show a greater per cent of school journals which appear weekly. Evidently the magazine rather than the newspaper type has dominated in the development of American educational journalism, though the study of content has shown the very great and increasing share of attention given to news items for many years. Just why periodicals carrying so large a per cent of news material have not adopted the plan of more frequent issue might be difficult to understand were it not for the very evident great difficulty of finding content which is worth while even when issued but 10 or 12 times annually. Corresponding with the great uniformity of monthly issue, the subscription price of American school journals was very generally from the first \$1 a year. Similar periodicals in England, France, and Germany showed no such uniformity, though the average was probably not very different. In considering

the growth of circulation this practical constancy of subscription price at all times except for a brief period when war prices had their effect should be kept in mind. A dollar each year to a teacher with a salary of \$40 or \$50 a month would represent a less serious investment than to a teacher receiving \$2 a week and board, or even \$15 or \$20 a month. Possibly teachers were more inclined to weigh carefully the value received from an expenditure which loomed so large; more discerning judgment would no doubt have been used toward the close of the period studied, if subscribing for a school journal had meant the outlay of so large a per cent of the week's earnings. In other words, great increase in circulation was not proof of a proportionate increase of adaptation to teachers' needs.

Summarizing the discussion, it may be said that the very limited circulation of the earlier school journals was almost entirely among school officers, ministers, persons prominent in various other professions, and among teachers holding the more important positions. The problem of providing material sufficiently general to appeal to the laity and of enough professional content to prove of practical value to teachers was gradually given up as impossible of solution and the appeal made more and more to the typical teacher, whose limitations in training, experience, and opportunities for the development of initiative, resourcefulness, and taste have been the subject of careful studies as well as matters of common observation.¹ It has been shown that circulation among teachers has gradually increased until the probability that a teacher was provided with some sort of school journal was perhaps 50 times as great in 1900 as in 1850. This estimate assumes that less than half of the gross circulation in 1850 was among teachers and that the number who subscribed for more than one would not be proportionately greater at one time than at another. It should be observed that this great circulation is a measure also of the needs and tastes of those who teach; if ample support is accorded to inferior periodicals, the real inferiority is that of the teachers; if higher class journals are most adequately supported, this is an equally valid index of superior taste. Facts have also been cited which indicate that the period of most rapid growth of circulation among school journals as a class had passed, and that further development would probably be in the direction of further specialization and improvement in the quality of such publications. The problem of furnishing teachers with at least some kind of school journal having been solved, emphasis upon the character and value of those in circulation may be expected to assume greater importance.

¹ Coffman: *The Social Composition of the Teaching Population*, 81.

Chapter VIII.

SOURCES AND CHARACTER OF SUPPORT.

Income from subscriptions and from advertising constitutes the chief source of revenue for periodicals. Before considering these in relation to school journals, several minor aids to their financial support will be noted, some of which, having been treated elsewhere, need but to be recalled at this point. As the first of these may be named State subsidies, quite common before 1875 and continued much later in a few cases. The entire sum appropriated for this purpose is estimated at a little less than \$300,000, in addition to comparatively small sums used by local school officers out of district funds.

Collections taken at the State teachers' associations were a form of philanthropy which yielded an amount of which no accurate estimate can be made, but it is quite safe to assert that it was much less than that given by the States officially.

A third means of support, quite common in the earlier periods, was the philanthropic effort of well-to-do persons deeply interested in education. The sacrifices of some of the editors themselves were not inconsiderable, and were made with the full recognition of the fact that consciousness of service rather than tangible reward would probably be the return for efforts put forth.

The Connecticut State Board of Education, in recommending State aid in circulating the Connecticut Common School Journal, is quoted: "Thus far its publication has been sustained by individual liberality and principally by the sacrifices of the secretary of the board" (Barnard). The sacrifices of the same editor in maintaining his greater work, the American Journal of Education, have been mentioned, and less remarkable cases of editorial zeal were not unusual. But in the passion for free education and its promotion by all available means before taxation for public schools was well developed, contributions of money by public-spirited citizens became a fairly well recognized form of charity, depended upon to some extent by editors of educational journals. The editor of the American Annals of Education¹ quotes the Eclectic Institute Journal of Education: "The Journal will be published semimonthly without charge. For any sums, however, that may be forwarded as contributions to the cause of education a suitable number of additional copies shall be furnished to the donor for distribution." After this quotation the editor continues:

We owe it to justice to state that a sum more than sufficient to circulate such a work gratuitously was paid the last year in providing for and publishing the Annals of Education and circulating gratuitous copies, and that our subscription the present year is not likely to do more than discharge this arrear, leaving all the labor which has been bestowed to be compensated by that richest of rewards * * * the hope of doing good.

The Common School Assistant² (1836) had been helped by "a number of philanthropic gentlemen," one of whom sent his check for \$100, and the Common

¹ Rep. of Conn. Bd. of Ed., 1841, 5.

² Vol. I, 4, 20.

³ Amer. Annals of Ed., 1832, 301.

School Advocate of Illinois¹ cites these precedents in making its own appeal, as follows:

Perhaps some will feel so warm an interest in the Advocate that they will furnish us the means for the gratuitous circulation of a number of copies. A few philanthropic gentlemen, feeling the necessity of a cheap paper for the improvement of common schools, generously contributed the means of publishing 50,000 copies of the Common School Assistant, and a single individual ordered 20,000 copies of a subsequent number circulated at his own expense.

Later the editor mentions an Illinois citizen who had paid for sending the Common School Assistant² to every postmaster in Illinois. "A generous benefactor" sent the Massachusetts Common School Journal³ to 500 committees, requiring only that they pay postage. The "public" contributed one-third enough to pay expenses of the Rhode Island Educational Magazine.⁴ A "liberal citizen" supplied all the districts of Polk County with the Voice of Iowa.⁵ The book and supply house of William B. Smith & Co., of Cincinnati, sent the School Friend for two years free to all teachers, school officers, or clergymen who asked for it,⁶ the purpose being "not wholly benevolent." The circulation reached 12,000, and the periodical was by no means a mere advertising sheet. The same company donated \$200 to aid the Indiana School Journal.⁷

Such examples of private benevolence were not rare, and though the advertising of books and supplies, private schools, and other commercial motives were frequently evident, much of the money privately contributed toward the circulation of educational periodicals came as the result of genuine faith in education showing itself in unattached philanthropy.

As an organized philanthropic enterprise, the Peabody Fund lent financial aid to several school journals in the South during the period of restoration and revival of educational institutions after the Civil War. A hundred dollars annually was thus used to circulate the Ohio Educational Monthly⁸ in Tennessee; the same journal was sent to West Virginia for a short time. The usual plan was to furnish \$200 a year to a local State school journal. Between 1870 and 1884 such aid was continued in Virginia 14 years; West Virginia, 10; Alabama and Louisiana, 5; Arkansas and North Carolina, 4; Tennessee and Texas, 2; and Georgia, 1 year. The total amount thus expended by the Peabody Fund was about \$10,000.⁹

The general facts of circulation have already been presented. In relation to financial support, delinquency, large exchange lists, and uncirculated copies, and the adverse effect of State support upon general circulation should be recalled. In addition, it should be noted that every financial stringency reflected itself in increase of delinquency and decrease of renewals and new subscriptions.¹⁰ The stress of the Civil War stopped the publication of all such periodicals in the South; the increased cost of paper and supplies, 100 to 200 per cent, caused most of the surviving journals in the North to increase subscription prices, which, with no corresponding change in teachers' salaries, affected circulation most unfavorably.¹¹

¹ Common School Advocate, 1837, I, 3.

² 1837, I, 16.

³ Mass. Com. Sch. J., 1852, XIV, 80.

⁴ R. I. Ed. Mag., 1833, II, 4.

⁵ Voice, 1857, I, 89.

⁶ Sch. Friend, 1848, II, 98, 130.

⁷ Ind. Sch. J., 1856, I, 9.

⁸ Ohio Ed. Mo., 1860, XVIII, 75, 141.

⁹ Peabody Ed. Fund Proceed., 1870-81, 1885.

¹⁰ Ind. Sch. J., 1862, VII, 62, IX, 374.

¹¹ Ohio Ed. Monthly, 1864, XIII, 152.

Editorial work was usually performed with little or no remuneration among the State association journals and the periodicals officially edited, but aside from the cost of publication there were many items of expense. Paid contributors have been mentioned in connection with the Connecticut Common School Journal, and occasionally State periodicals note the cost of their leading articles.¹ State associations sometimes employed State agents, part of whose task it was to secure subscriptions for the official organ.² Lectures by the editor, free copies, books, and other rewards were given for new subscribers, lists of names, or settlement of arrears; free copies were very generally sent to leaders in order to secure their good will.³ Finally, most subscriptions were at minimum general rates, and very often even lower in combinations or at club rates. With these facts in mind it is not difficult to accept the statement so frequently made that only advertising could promise financial remuneration to editors and publishers, and that without advertising all school journals would have been conducted at a great loss.

With the exception of a very small number of educational periodicals like the *School Review*,⁴ which announced in its opening number that it was supported by the publication fund of the Sage School of Philosophy of Cornell University and "unhampered by financial problems," or Dr. Barnard's *American Journal of Education*,⁵ which is said to have cost its editor \$50,000 more than any and all receipts from it, all educational periodicals have depended upon advertising for a large part of their support.

Two important problems presented themselves in connection with advertising—what character of advertisements to admit and how to preserve an independent and unsuspected attitude in relations with great advertising companies, upon whose patronage all profit or even the life of a periodical depended. Before making an estimate of the amount of support derived from advertising, these will be considered. The question of what should be admitted to advertising columns apparently caused little room for difference of opinion until after the Civil War period. Books and school supplies occupied most of the space, and it was clearly out of the question for a school journal to advertise anything of doubtful moral influence. But in the great expansion of circulation among teachers noted in the preceding chapter, and the general growth of the advertising business, all this changed. Young or inexperienced teachers offered a much better field for advertising in crude and flagrant style all manner of near-frauds. Lottery tickets, mushroom teachers' insurance schemes, real estate speculations, and mining bonanzas, fortune tellers and medical quacks, lying statements with regard to irresponsible private schools, and miscellaneous "free" advertisements characteristic of the poorest farm or story papers, are some of the numerous questionable forms of advertising which found their way into many school journals. The following quotation calls attention to the situation:⁶

There are many fakers who prey upon the public through newspaper advertising, and some of the worst rascals get into reputable periodicals by paying cash in advance for their advertisements. * * * It has been said by persons in a position to know whereof they speak that disreputable advertisers can more easily gain access to the columns of school journals and religious periodicals than to any other class of publications. In our opinion, the educational press can do a good thing for its members and for the teaching fraternity by taking a firm stand against fraudulent and other objectionable advertisements.

¹ Ohio Ed. Mo., 1874, XXIII, 136.

² Ind. Sch. J., 1856, I, 269; II, 126.

³ Mo. J. of Ed., 1857, I, 13.

⁴ Sch. Rev., 1893, I.

⁵ W. S. Monroe: Ed., *Labor of Henry Barnard*, 10-29.

⁶ Sch. News and Practical Ed., 1899, XIII, 65.

The worst phase of the matter was, perhaps, not so much that many absolute frauds or charlatans were advertised, as that the somewhat helpless character of much of the teaching population led to misunderstanding and loss upon the part of those who read such advertisements and had so little intelligence as to take them literally. Consider the possible effect upon an ignorant child, who wished to secure a certificate at once and begin teaching, of the following which was part of a full-page advertisement of a widely circulated school journal:

"We have the largest normal school in the world and have graduated over 10,000 teachers during the past five years. We guarantee satisfaction."

This followed a statement that if time and money were of no importance, a regular normal school might be considered, but the cheapest and quickest way to secure a "normal education" was to send \$3.25 to enroll. The institution advertised was a correspondence concern of short life. While there were fortunately several school journals which were as careful about the kind of advertising matter admitted as the average magazine, it can not be said that as a class the character of the advertising pages from 1880-1900 was a matter to be proud of, though signs of improvement were in evidence.

The maintenance of an independent and unsuspected attitude in relation to school-book advertising became a problem with the growth of the large publishing houses. It is not difficult to discover that a large per cent, perhaps a majority of those interested in the early school journals, were authors or publishers of textbooks, and both the advertising pages and reviews of "books by the editor" often show their leaning. Competition of rival companies soon gave commercial value to such preferences and accordingly made the editors' problem more that of neutrality. The *Teacher and Western Educational Magazine*¹ states the case as follows:

These advertisements go largely toward sustaining the expense of publication, perhaps one-half or more; if a decided preference be given (to certain books) * * * then the publishers of those works which are not commended withdraw their advertising. The journal is therefore muzzled, and it dare not speak out, however meritorious and superior a work may be that appears, and however advantageous its introduction into the schools might be.

The same difficulty is shown more graphically by the editor of the *Michigan Teacher*:²

In the criticism of educational works it is our purpose to pursue an independent course, discussing with candor * * * the merits of such books as seem worthy of notice. It is certainly a matter of profound regret that so little discrimination is used in the criticisms which usually appear in our educational journals. It has seemed to us that such notices were written when spectral booksellers were peering over editors' shoulders, dictating terms of commendation and threatening displeasure and consequent loss of patronage whenever their manhood prompts an adverse though honest expression of opinion. We fully understand that in these days when printers make large bills without compunction, advertising patronage is not to be despised; yet we hope this will never tempt us to withhold our honest opinion of every work under consideration.

It is not impossible to realize the position of editors with such advertising. Without it, no unsubsidized school journal at any time could long maintain itself. It was perhaps due to this necessity for caution in book reviews that they almost universally lost all semblance of value as estimates of books under consideration.

The independent and unsuspected attitude was even more difficult in the few cases of educational journals published by large book publishing houses. The editor of an ordinary State association or independent periodical, if the author

¹ 1882, I, 302.

² 1894, I, 2, 3.

few textbooks, might be prejudiced in their favor; the large publishing house countered the same problem with regard to a large list of books. And no matter how nearly neutral all book references might be, rivals were still suspicious. The editor of the *American Annals*¹ in commenting upon school papers says:

These are becoming quite numerous. Ohio has three, and another is proposed. Nois has one. * * * We can scarcely have too many of these journals provided they are conducted in the right spirit, by judicious men, and for right purposes. But if they are designed, as we fear some of them are, such, for example, as the *Common School Advocate*, of Cincinnati, chiefly to "puff" or sell their own books or accomplish certain local purposes, they will be of little service in the end perhaps a nuisance.

The first school journal published by one of the large book companies, the *American Educational Monthly*,² devoted more than 100 pages to a defense of some of the company's books, and drew largely upon its textbooks for its articles on method. Its successor, *The National Teachers' Monthly*,³ deemed it necessary in its opening number to proclaim its independence, stating that:

Although issued by a book publishing house, the *National Teachers Monthly* will rise above all private interests; will have strong convictions and express its own.

Nevertheless a very great per cent of the pages of this periodical during most of its existence was filled with quotations from books issued and sold by its publishers, who also occupied more than half of the advertising space. The editor's keen suspicion of anything having corporate interests as its moving force and the discriminating sense of editors made these periodicals the subject of much unfriendly notice by rival "independent" publications. So long as they were issued free and frankly for advertising purposes less adverse criticism occurred.

The proportion of support derived from advertising increased from the first. In many instances it ceased to be the case of an educational journal devoting part of its space to advertising and became that of an advertising sheet carrying a few columns of school news or petty schoolroom devices. In the former circulation was an important source of revenue; in the latter money derived from circulation was almost a negligible quantity when compared with the added advertising value of a large subscription list.⁴ Newspapers and periodicals in general secured a little less than half of their support from advertising in 1880, and considerably more than half in 1900,⁵ and a study of advertising pages and published rates indicates that school journals depended not upon this source of income. In relation to advertising as well as circulation, the local journal was at a disadvantage. The competition of successful journals of wide circulation is mentioned as a serious problem as early as 1870.⁶ Before any educational periodicals of very large circulation were in the field, the advantage of a large subscription list showed itself both in higher rates and in the increased amount of space. Journals of the method-device type in 1880-1900 averaged about 20 per cent larger proportion of advertising material than those of the local group, and some others carried an even greater amount.

From the discussion of support it may be seen that school journals as a class have been close to the poverty line. Even ordinary advertising was not sufficient to keep many alive and render a few prosperous. Two auxiliary enterprises associated themselves with educational periodicals very early and very

¹ 1838, VIII, 285.

² 1864-1874, I, XI.

³ 1874, I, 20.

⁴ North, 85.

⁵ U. S. 12th Census, IX, Part III, 1040.

⁶ Ohio Ed. Mo., 1870, XIX, 408.

naturally—the school-supply business and the teachers' agency. No specific mention has been made of either of these, for with few exceptions all the more prosperous journals since 1870 were connected with one or both of these. The writer has been unable to find more than a few in general or local circulation among teachers during a period of five or more years since 1870 not partly dependent upon these for support. And in the case of these few, especially in the State or local group, it was usually State aid in the form of a direct appropriation or substantial clerical assistance or office quarters furnished at State expense that kept these periodicals alive.

A summary of all that has been indicated in this and preceding chapters concerning support would show that the problem has seldom been satisfactorily solved. Philanthropy, no matter how disinterested and commendable, has not been sufficient in extent to constitute a large element. The theory involved in State subsidies is plausible enough; it would seem to make possible placing before teachers or officers a better periodical than they were willing to pay for, but it would be difficult indeed to prove the superiority of subsidized journals. And though the great dependence upon advertising and auxiliary undertakings of commercial nature has often proved a deleterious influence, and ambitious editors have found that their high ideals of content have carried them above the paying level, it is the belief of the writer that independent editorship, when united with reasonable business ability, has produced the best periodicals. A few superior editors, however, might have achieved a higher degree of leadership and wrought more effectively had they been aided by some fund or endowment which exercised no trammeling influence upon their activities. Such an endowment should yield large returns to education in the improvement of educational periodicals.

Chapter IX.

SUMMARY AND PRESENT TENDENCIES.

The development of educational periodicals has been sketched from remote and general European origins. /Broadly speaking, after pioneer efforts, three stages may be marked—the official, State teachers' association, and independent or commercial, though official connections have not entirely disappeared and commercial motives were always strongly in evidence. Originally circulated among school officers and among the more influential classes of the general public, rather than among the rank and file of those who taught, their content has gradually been made more professional until few except teachers would be expected to find value in the pages of 95 per cent of them. / A brief summarizing statement of the more important tendencies of this study will be given.

Specialization, in addition to being responsible for the State periodicals and the short-lived county journals, showed itself in many efforts to meet the needs of grade teachers, high-school teachers, kindergartners, and minor interests and groups. Nearly every educational fad or fashion develops its special organ. Such minor educational movements, as a rule, being short-lived, but zealously advocated by a few, their periodicals have usually been intensely devoted to their one ideal, and decline or disappear when interest in the "reform" wanes. Such ventures, it may be noted, were increasingly numerous toward the close of the century, and may be expected to continue to be launched. Their chances of surviving as long as five years are certainly not greater than 1 in 5, if the period from 1870-1900 may be taken as a general indication of their probable success.

The local school journals, originally designed to promote State systems of education to constitute an official medium between State and local school officers, or to contain the reports and addresses of State teachers' associations, performed an unmeasured but very large service. No one can read extensively among the volumes issued before 1870 without being impressed with the great zeal for public education displayed by their editors and supporters, and when the character of their content and circulation is considered, there can be no doubt of their having exercised considerable influence in creating and shaping school systems, and in diffusing liberal views of what public education should become. They have, however, encountered limitations in nearly every direction. Financially, they have never been independent; when not openly subsidized by the State they have leaned upon official patronage of various kinds—advertising advantages, printing contracts, or clerical assistance due to connection with the educational department of State governments, or associated themselves with commercial teachers' agencies and the school supply business. They have seldom been able to support editors of ability who could profitably spend much time in conducting them, with the result that, as a class, it may be said that State school journals have been poorly edited. By name and nature the circulation of such periodicals was limited to a single State. With the growing importance of method content they were unable to compete with the widely

circulated method journals which had greater advertising patronage and better facilities for securing the services of regular contributors. Question books made lists of examination questions available without subscribing for a school journal. School laws, less subject to change and better understood, ceased to be dependent upon school periodicals for explanations and comments; improved office facilities, especially the use of such machines as the mimeograph and multigraph, have made possible more prompt and extensive circular letter correspondence, thus further supplanting the local journal as an official medium or even the bearer of official news. State teachers' associations have, in general, much larger membership than formerly, which increases the distribution of copies of their reports, and this largely removes addresses delivered or papers read at the annual meeting from the legitimate content of the local journal, since few care to pay for material which will, a little later, be received without expense. Papers read at local gatherings, or teachers' institutes, which have often taken the space formerly occupied by State association discussions, may be considered as a class to have much greater value for their writers than for subscribers at large, who are apparently expected to read them. Still further tending to reduce the field once occupied by the local journal, State departments of education have recently shown a tendency to publish an increased number of bulletins, directories, and special reports, some of these issued periodically; and a number of the State associations and the National Education Association are publishing their proceedings quarterly or monthly, which lends them something of the nature of a periodical. In consideration of the foregoing, it would seem that local journals have preeminence only in the field of local school news. The general purpose ideal of the local journal seems to be impossible of realization when all the factors are considered. As a smaller and less inclusive type of publication, frankly finding its function in giving school news, the local journal would have a field of its own. And adopting the educational newspaper ideal would probably result, as in England, France, and Germany, in greater frequency of issue for this class of periodicals.

The method and device journals began and continued as a specialization to meet the needs of teachers actually engaged in the work of instructing children in common school subjects. It would seem that with the growth of departmental teaching, such journals might be expected to develop for each branch in the curriculum, and pioneers in this newly specialized field of single subject publications show a tendency to give less attention to devices of presentation and more to securing good supplementary content. While their problems are different, there seems to be no final reason why grade teachers should not have as serious studies of the subjects they teach as are available for their colleagues in high schools, instead of so much of what has been named "method chasing" as has usually been characteristic of their professional papers. But the largest single field for publishers of school journals to supply, is that of grade and rural teachers who give instruction in many subjects. So long as the majority of these want ready-made devices and lesson plans fully elaborated, with questions and material assembled, so long will such material be characteristic of the most generally circulated school journal. It should also be noted that the better method papers have developed many exceedingly helpful aids for which the epithet of "ready made" should carry no adverse significance. These neither recognize nor violate important educational principles, but free teachers from the routine or even manual efforts of much mechanical work, which would be slightly, if any better, for being original or executed to meet expressly a local situation. It has by no means universally been the most ignorant or incapable teachers who have asked for practical helps for schoolroom work, and the coa-

ception of what is practical may be expected to change with general improvement of the teaching force.

The group of periodicals devoted to higher education and to serious studies of education has, of course, been of many times greater importance than their inconsiderable circulation would seem to indicate; and the number of these showed a tendency to increase much more evident if the catalogue of those in existence in 1916 be compared with the list of those published in 1885 or 1900. The value of this class of periodicals consists not alone in the quality and plane of the studies they contain, but in the fact that these almost alone among educational periodicals give us a considerable point of contact with educational movements of the past, or in other countries. They are seriously concerned with principles and the philosophy which must underlie any sane or large views of education, rather than the ephemeral expedients of educational machinery, and they make possible worthy comparisons of our methods of solving school problems by occasional discussions of the means used in other times and by other peoples. It is not too much, perhaps, to say that the tendency to over-emphasize the external phases of education, illustrated by our magnificent school buildings filled too often with mediocre or inferior teachers, and the general readiness of the educational public to seize upon and advocate superficial remedies for school situations of fundamental social importance, are due to lack of acquaintance with the experience of the educational world of which we form a part. This small group of journals performs the important service of connecting us with this world by furnishing educational thought detached from the immediate problems of how to teach, or manage, or finance, or regulate our schools. As the general intelligence of teachers rises, there will doubtless be a greatly increased demand for such periodicals.

The proper function of the school journal can be definitely stated only when due regard is given to diverse interests and varying intellectual levels among teachers. In addition to educational news, which in itself is worth while, it should contain vital general content of interest to all students of education. Ideally this should include all who teach; practically only a small per cent of teachers devote much attention to educational matters not closely connected with their own work. The only means by which a teachers' periodical can realize its purpose widely is to approximate the plane of the multitude; in doing this it will meet disapproval from many able minds which do not need specific helps and to some extent from educational leaders who naturally would prefer a greater amount of material of less mechanical nature. But the educational journal which does not furnish a large amount of directly applicable content finds itself isolated—read by a select class, important but not large. It is not a question of expense; the best high-grade educational periodicals would not be widely read if circulated gratuitously, owing to the fact that their intellectual level and that of the majority of teachers do not coincide. It is a sign of a better culture level among teachers that the character of the specific material in school journals is improving; when all such periodicals reach the plane of furnishing a considerable amount of serious general material upon education, along with valuable specific helps based upon sound principles, it will be possible to aver that they are realizing their proper function in the fullest degree.

LIST OF EDUCATIONAL PERIODICALS.

The accompanying list includes, in most cases, dates of establishment and last issue; auspices, if other than private, under which the periodical was conducted, and mention of other important features, prior to 1900, such as long terms of editorship. Unless specifically stated as otherwise, monthly publication is indicated. For convenience the list is divided into three groups. The first includes all educational periodicals established before the close of 1875; the second, all of importance whose first appearance was since that time; the third embraces a miscellaneous collection of unimportant or short-lived publications since 1875, but excludes county papers.

The following abbreviations are employed: Those conventionally used to indicate States; S. T. A. for State Teachers' Association; and \pm for date of last issue. The name Barnard in parentheses following that of a periodical indicates that the only information concerning it was taken from Dr. Barnard's list.

A. EDUCATIONAL PERIODICALS ESTABLISHED BEFORE 1876.

1811.

Jan. Juvenile Monitor or Educational Magazine. New York.

Henry Barnard states that this was the earliest serial publication in this country devoted to education and names Albert Pickett as its editor. (Barnard's American Journal of Education, 1875, Vol. XXV, p. 942.)

1818.

Feb. The Academician. New York.

Semimonthly. Conducted by Albert and John Pickett, president and corresponding secretary, respectively, of the "Incorporated Society of Teachers." Twenty-five numbers issued. \pm January 29, 1820.

1826.

Jan. American Journal of Education. Boston.

William Russell, editor. Became bimonthly, 1829; called American Journal of Education and American Lyceum, 1830; \pm July, 1830, continued in American Annals of Education.

Nov. Teachers' Guide and Parents' Assistant. Portland, Me.

Semimonthly. J. L. Parkhurst, editor. \pm 1828. Incorporated with American Journal of Education, March, 1828. Infant school, Pestalozsian method; quotations from Neef, Griscom, Jardine, Edgeworth, and local papers.

1829.

Apr. The School Magazine. Boston.

W. C. Woodbridge, editor. \pm 1829. (Barnard.)

American Quarterly Register and Journal of the American Education Society. Andover, Mass.

Conducted by secretary of the society. \pm 1843. (Not a school periodical primarily.) Concerned chiefly with higher education and the education of theological students; part of each number devoted to educational intelligence; one or two comprehensive surveys of public education based upon official reports, personal observation, and correspondence of the editor.

1830.

June. Education Reporter and Weekly Lyceum. Boston.

Published by Willis and Rand at office of Boston Recorder. Rev. A. Rand, editor. Infant schools, Lancaster, Fellenberg. Wide range of educational topics—teachers, method, discipline, books and apparatus, course of study. \pm January, 1831.

July. The Schoolmaster. Hempstead, L. I.

Semimonthly. Timothy Clowes, editor. Mentioned as devoted to the interest of teachers and scholars especially of common schools. Probably only one or two numbers issued.

1830.

Aug. American Annals of Education and Instruction and Journal of Literary Institutions. Boston.

W. C. Woodbridge, editor, 1831-1838; M. F. Hubbard, editor, 1839. Conducted by William Alcott during 1837. \pm December, 1839.

1831.

July. Academic Pioneer. Cincinnati.

By Western Academic Institute. \pm 1831; only few numbers issued.

Dec. Reporter and Journal of Education. Boston.

W. C. Woodbridge, editor. \pm 1831. (Barnard.)

1832.

Jan. Journal of Instruction of the Philadelphia Association of Teachers. Philadelphia.

Semimonthly. \pm March, 1832. (Barnard.)

1832.

Apr. Eclectic Institute Journal of Education. Lexington, Ky.

B. O. Peers, editor.

July. Family Lyceum. Boston.

J. Holbrook, editor. \pm 1832. (Self-Instructor and Journal of the Universal Lyceum, New York, 1842-43, by the same editor.)

1833.

June. Southern Journal of Education. Georgia.

(Barnard.)

1834.

Inciter. Lancaster, Pa.

Schoolmaster and Academic Journal. Oxford, Ohio. \pm 1834.

1835.

Jan. Monthly Journal of Education. Princeton, N. J. (Philadelphia).

E. C. Wines, editor of first six numbers; removed to Philadelphia and called Monthly Advocate of Education; but no more numbers issued until January, 1836; then called Schoolmaster and Advocate of Education. J. Frost, editor. \pm 1836. Much quotation from Cousin's report and London Journal of Education.

1836.

Jan. Common School Assistant. Albany, N. Y.

J. Orville Taylor, editor. Nearly 40,000 copies monthly circulated during first year, to a great extent gratis, through the efforts of "a number of philanthropic gentlemen." \pm April, 1840. Cousin's report, short articles on method. Fellenberg, Pestalozzi.

1837.

Jan. Common School Advocate. Madison, Ind.

William Twining, editor. \pm 1837.

Jan. Common School Advocate. Jacksonville, Ill.

Published for one year by E. T. and C. Gowdy; edited by Rev. Theron Baldwin. \pm November or December, 1837. Cousin's reports, extracts from State reports.

Jan. Common School Advocate. Cincinnati.

\pm 1841. (Barnard.)

Jan. Universal Educator. Cincinnati.

Nathaniel Holly, editor.

Mar. Western Academician and Journal of Education and Science. Cincinnati.

John W. Pickett, editor. Organ of Western Literary Institute. \pm February, 1838. Female education. Stowe's report, Lancaster, Pestalozzi; chief contributors, Pickett, McGuffey, and various ministers.

1838.

Mar. Journal of Education. Detroit.

Last two numbers of Vol. I and all of Vol. II issued from Marshall, Ill. John D. Pierce, State superintendent, editor. Sent to all school boards at State expense. \pm at end of second volume, February, 1840. Cousin's (Prussian) report in full; Stowe's report, comments of superintendent.

Mar. Ohio Common School Director.

Samuel Lewis, State superintendent, editor. Circulated at State expense. Stowe's report, addresses of State superintendent, Cousin's reports. Circulated a year.

Apr. Pestalozzian. Akron, Ohio.

Sawtell and Smith, editors. \pm 1838.

1838.

Apr. **The Educator.** Easton, Pa.Semimonthly. Edited by teachers of Lafayette College. \pm August 15, 1839. Quotations from State reports, Stowe's report, German, English, and Dutch education, Fellenberg.*July.* **Educational Disseminator.** Cincinnati.A. and J. W. Pickett, editors. \pm 1838.*Aug.* **Connecticut Common School Journal.** Hartford.Published under direction of Board of Commissioners of Common Schools; Henry Barnard, secretary of board, editor. Suspended, 1842; revived by Barnard in 1851 as **Connecticut Common School Journal and Annals of Education**, and edited by him, 1851-1854; continued (new series) as organ of C. S. T. A., 1854-1866, under management of committee of editors. Sent to all school visitors at expense of State during most of the time. A few volumes published at New Britain. \pm December, 1866.

1839.

Jan. **Common School Journal.** Boston.Semimonthly. Horace Mann, secretary Massachusetts Board of Education, editor, 1839-1848; William B. Fowle, editor, 1849-1852. \pm December, 1852.*Jan.* **Family and School Visitor.** Bangor and Portland, Me.

Cyril Pearl, editor.

1840.

Mar. **District School Journal for the State of New York.** Albany.First volume issued from Geneva. Francis Dwight, editor, 1840-1845; S. S. Randall, 1846-1847, 1850; Rev. W. H. Campbell and Edward Cooper each editor for a year or more. State subscribed for more than 10,000 copies annually, 1841-1850. United with **New York Journal of Education as District School Journal of Education of the State of New York**, May, 1851. \pm April, 1852.

1841.

Jan. **Mirror and Students' Repository.** Newbury, Vt."Devoted to the interests of common school education, science, and literature." \pm December, 1841.*May.* **Illinois Common School Advocate.** Springfield.

Published under auspices of Illinois State Teachers' Society; E. R. Wiley and A. T. Bledsoe, publishing committee. Only five numbers issued, May-September.

Nov. **Mental Cultivator.** Poughkeepsie.Isaac Harrington, editor. \pm October, 1842.

1842.

Apr. **Western School Journal.** Louisville, Ky. (or Covington?).O. S. Leavitt, editor. \pm 1842.

1843.

Oct. **Southern Educational Journal.** Mobile, Ala.

F. H. Brooks, editor. (Barnard.)

1844.

Jan. **Common School Journal of the State of Pennsylvania,** Philadelphia."Published under supervision of the Superintendent of Common Schools of the Commonwealth." John S. Hart, editor. \pm December, 1844. Pennsylvania laws and reports, quotations from Mann and Barnard.*Feb.* **Teachers' and Pupils' Advocate.** Philadelphia.

E. Rea, editor. (Barnard.)

1845.

Sept. **Teachers' Advocate.** Syracuse, N. Y.Edward Cooper, editor, 1845-1847. Removed to New York, united with **American Journal of Education**, 1847. \pm May, 1847.*Nov.* **Journal of Rhode Island Institute of Instruction.**Edited by Henry Barnard and committee of editors. First volume included 14 numbers and 13 extras; second and third volumes even larger. \pm January, 1849.

1846.

Jan. **Practical Educator and Journal of Health,** Boston.William W. Cornell, M. D., editor. \pm 1849.*July.* **Essex County Constellation.** Newburyport, Mass.Weekly. John S. Foster, editor. With 16 contributors, four being ministers, the rest chiefly schoolmen. \pm June, 1847.

1846.

July. Ohio School Journal. Kirtland.A. D. Lord, editor. Removed to Columbus after first year. \pm January, 1850, united with School Friend of Cincinnati.**Oct.** Common School Advocate. Indianapolis.

H. F. West, editor. One number published.

Oct. School Friend. Cincinnati.W. B. Smith & Co., publishers. Gratuitous circulation during first two years; united with Ohio School Journal, January, 1850, and called School Friend and Ohio Journal of Education. \pm September, 1851.**Nov.** Free School Clarion. Masillon, Ohio.Conducted by Dr. W. Bowen until 1848; then by Lorin Andrews and M. D. Leggett. \pm 1849.

1847.

Jan. Connecticut Common School Manual. Hartford.Rev. Merrill Richardson, editor. Two annual volumes issued; was then taken over by Connecticut S. T. A. \pm December, 1848.**Jan.** Educational Magazine and Review. Boston.

J. W. Ingraham, editor. Only one number issued. (Barnard.)

Jan. Northwestern Educator and Magazine of Literature and Science. Chicago.J. L. Enos and associate editors in 1847; later Enos became editor and publisher. \pm 1849. The object stated to be the exposure of the dangers of fallacious theories of education and setting forth and defense of true principles.**Feb.** American Journal of Education. New York.Joseph McKeen, editor. May, 1847, united with Teachers' Advocate and continued as New York Journal of Education. \pm May, 1851, consolidated with District School Journal.**Feb.** Public School Advocate. Houston, Tex.Conducted by Texas Literary Institute. J. W. Miller, P. W. Gray, H. H. Allen, editors. \pm 1847; only one or two numbers issued.**May.** The School Journal and Vermont Agriculturist. Windsor.Bishop and Tracy, editors. Approved by State school commissioner and V. S. T. A. \pm April, 1850.**July.** Monthly Educator. Rochester, N. Y.Parsons E. Day, editor. \pm 1848. (Barnard.)**Nov.** The Radix or Virginia Public School Advocate. Richmond.S. A. Jewett, editor. \pm December, 1847; continued as Southwestern Journal of Education, Knoxville, Tenn.

Western School Journal. Cincinnati.

W. H. Moore & Co., publishers. Gratuitous circulation. \pm 1848.

1848.

Jan. Massachusetts Teacher. Boston.Semi-monthly during first year. The first monthly periodical conducted by a State teachers' association and edited by board of editors. \pm December, 1874, consolidated in New England Journal of Education.**Jan.** Southwestern Journal of Education. Knoxville, Tenn.Formerly the Radix of Virginia. S. A. Jewett, editor. \pm 1849. (Barnard.)**May.** Common School Advocate. Belfast, Me.Semi-monthly. Edited by secretary of State board of education (Crosby). \pm August, 1849.**Oct.** Southwestern School Journal. Tennessee.Rev. D. R. McAnally and Rev. Thomas MacIntire, the first principal of female academy, the second of East Tennessee Deaf and Dumb Institution, were editors. \pm 1849.

1849.

Jan. Practical Teacher. Providence, R. I.W. S. Baker, editor. \pm 1849. (Barnard.)

1850.

Jan. Ohio Teacher and Western Review. Cincinnati.Thomas Rainey, editor. \pm 1851.

1850.

June. Eclectic Journal of Education and Literary Review. Chicago.

O. F. Bartlett, editor; succeeded by Dr. N. S. Davis, April, 1851. editor of one number. ± April, 1851.

July. Free School Clarion. Syracuse.

W. L. Crandall, editor. A campaign paper in the interest of the free school law thought to be in danger at the polls. ± 1850.

Oct. Journal of Education. Bath, Me.

Semimonthly. J. T. Huston, editor. ± 1853.

Nov. Teachers' Magazine. Pittsburgh.

J. J. Buchanan, editor. ± 1850. (Barnard.)

Northwestern Journal of Education. Madison, Wis.

O. M. Conover, editor. ± 1850. (Barnard.)

1852.

Jan. Ohio Journal of Education. Columbus.

(Published at Salem, 1876-1881; Akron, 1882-1895.) Established under auspices of O. S. T. A., conducted by resident editor and committee until 1858; called Ohio Educational Monthly beginning with 1860; E. E. White, editor, 1861-1875; W. D. Henkle, 1875-1881; Samuel Findley, 1882-1896; O. T. Corson, 1895- Continued, 1916-

Jan. Rhode Island Educational Magazine. Providence.

Conducted by E. R. Potter, State commissioner of public schools. Sent gratuitously to school officers by means of public contributions. ± December, 1853.

Feb. American Educationist and Western School Journal.

A. D. Wright, editor for first three numbers, issued from Indianapolis; B. K. Maltby, editor of remaining three numbers, issued from Cleveland, Ohio. ± 1852.

July. Pennsylvania School Journal. Lancaster.

A continuation of a Lancaster County educational journal begun six months earlier; the official school journal of the State, sent at State expense to school boards, except for short intervals, from 1855 to the present. State superintendents have been the editors; Burrowes, 1852-1871; Wickersham, 1871-1882; Higbee, 1882-1889; Waller, 1889-1893; Schaeffer, 1893- J. F. McCaskey was associate editor in 1866- Continued, 1916.

1853.

Jan. District School Journal of Education of the State of Iowa. Dubuque.

R. R. Gilbert, editor. Name became Iowa Journal of Education at beginning of second volume. ± At close of Vol. II, 1854.

Jan. Southern School Journal.

Established at Columbus; Vol. II published at Madison. Published as private venture by Rev. T. F. Scott; in November, 1853, G. S. T. A. adopted it as official organ and appointed committee of editors, most of them ministers. ± January, 1855.

Jan. The Teacher and Western Educational Magazine. St. Louis.

John H. Tice, superintendent of St. Louis schools, editor. ± December, 1853.

Oct. New York Teacher. Albany.

Established as organ of N. Y. S. T. A., edited by board appointed by association, T. W. Valentine, first resident editor; J. Cruikshank, resident editor, 1856-1866; large subscription at expense of State, 1855-1865. ± September, 1867- subscribers received American Educational Monthly which for two years added New York Teacher to its title.

1854.

Jan. Michigan Journal of Education.

(Detroit, 1854-1858; 1861; Ann Arbor, 1859-1860.) Established by M. S. T. A., Rev. J. M. Gregory, first resident editor, assisted by board of editors; circulated at State expense, 1857-1861. ± September, 1861.

Jan. Western Teachers' Advocate. Louisville, Ky.

Edward A. Cooper, editor. ± 1854.

Delaware School Journal.

A. H. Grimshaw and others, editors. Only a few numbers issued.

Indiana Journal of Education.

J. H. Gilkey, editor. (Barnard.)

Teachers' Voice and Vermont Monthly Magazine.

Under sanction of V. S. T. A. Z. R. Pangborn, editor. ± 1855.

1855.

Jan. Journal of Education. New Orleans.*Jan.* Journal of Education. Washington, D. C.

D. B. De Bow, editor. ± 1855. (Barnard.)

Jan. Teachers' Institute. Brownsville, Pa.

L. F. Parker, editor. ± 1855. (Barnard.)

Feb. Illinois Teacher.

(Bloomington, 1855; Peoria, 1856-1872.) Established as organ of State Teachers' Institute and conducted by board of editors until 1859; represented State superintendent more or less officially most of the time until sold to the Schoolmaster, Normal, February, 1873.

Mar. Rhode Island Schoolmaster. Providence.

First two volumes edited by Rev. Robert Allyn, State school commissioner; W. A. Mowry, editor, 1857-1860; edited by committee of R. I. Institute of Instruction, 1860-1869; after lapsing from March to October it was revived by T. W. Bicknell, commissioner of Rhode Island, and chiefly edited by him until 1874. ± December, 1874; consolidated in New England Journal of Education.

Aug. American Journal of Education. Hartford, Conn.

Quarterly. First two numbers issued as American Journal of Education and College Review, with Henry Barnard and Rev. Absalom Peters as editors. After this Henry Barnard, editor. ± 1881.

Wisconsin Educational Journal. Janesville.

James Sutherland and George S. Dodge, editors. ± 1856. Transferred to Wis. S. T. A.

1856.

Jan. American Journal of Education and College Review. New York.

Rev. Absalom Peters, editor. ± 1857.

Jan. Indiana School Journal. Indianapolis.

Established as organ of I. S. T. A.; W. D. Henkle, first resident editor; association elected editors, including the State superintendent, exercising decreasing control until 1870, when the Journal was sold to G. W. Hoss and W. A. Bell; Bell became sole editor August, 1871, remaining editor until June, 1899. Continued as Educator-Journal, 1916.

Jan. Southwestern School Journal. Louisville, Ky.

J. Heywood and N. Butler, editors. ± 1857.

Mar. Wisconsin Journal of Education. Madison.

(Racine, 1856-1857.) Conducted by Wis. S. T. A., with resident editor and board until 1865; received State aid, 1857-1864; suspended, 1865; revived, 1881, by State superintendent. Continued, 1916.

Sept. North Carolina Common School Journal.

± 1857.

Northwestern Home and School Journal. Chicago.

J. T. Eberhart, editor in 1859. ± 1862.

1857.

Jan. Educational Journal. Forsyth, Ga.

Weekly. G. T. Wilburn, editor. Devoted to education, with attention also to "arts, science, and news." ± 1861.

Jan. Educational Journal. Montgomery, Ala.

William F. Perry, State superintendent, editor. ± 1858.

Jan. Journal of Education. Manchester. (Concord.)

Established by Rev. N. E. Gage; conducted by N. H. S. T. A., after first year; published at Concord; H. E. Sawyer, resident editor. ± December, 1862.

Jan. School Visitor. Knoxville, Ohio.

A. Clarke, editor. ± 1857. (Barnard.)

Jan. The Voice of Iowa. Cedar Rapids.

Organ of State superintendent of schools, I. S. T. A. and Iowa Phonetic Association. J. L. Enos, editor, assisted by 15 others elected by I. S. T. A. ± October, 1858.

Mar. Educational Herald and Musical Monthly. New York.

O. St. John, editor. Conducted until 1864.

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1857.

July. Missouri Journal of Education. St. Louis.

Established as organ of M. S. T. A. Ira Divoll, local editor. Only one full number issued.

July. School Journal. Philadelphia.G. N. Townsend, editor. \pm 1859. (Barnard.)*Sept.* The Normal. Lebanon, Ohio.J. Holbrook, editor. \pm 1857. (Barnard.)

Our Schoolday Visitor. Philadelphia.

1858.

Jan. North Carolina Journal of Education. Greensboro.Established by N. C. S. T. A. and conducted by board of editors, J. D. Campbell, resident editor. \pm May, 1861.*Jan.* Sargent's School Monthly. Boston.H. Sargent, editor. \pm December, 1858.*May.* Missouri Educator. Jefferson City.Thomas J. Henderson, first editor, assisted by board selected by M. S. T. A. \pm October, 1860.*June.* Maine Teacher. Portland, Me.Edited by State superintendents; M. H. Dunnell, 1858-1860; E. P. Weston, 1861-1864, assisted part of the time by a dozen associates appointed by M. S. T. A. Title is Maine Journal of Education and School Officer, 1862. \pm 1864.*Oct.* Alabama Educational Journal. Montgomery.Conducted by S. T. A. Noah K. Davis, resident editor, with 12 associates and State superintendent, ex officio. \pm 1859.** Nov.* Teachers' Journal. Allentown, Pa.E. W. McAlpine, editor. \pm June, 1859.

Journal of Progress. Cincinnati.

John Hancock, editor. Advocate of phonography; contributions from prominent Ohio teachers; partly printed in phonetic alphabet. Same publishers, Longley Bros., conducted similar journal, Type of the Times, preceding this.

1859.

Feb. Kentucky Family Journal (Educational Monthly). Louisville, Ky.Weekly. Established under K. S. T. A., discontinued by resolution, 1859; succeeded by Educational Monthly, November, 1859, with E. A. Holyoke as resident-editor, aided by board of nine editors. \pm August, 1860.*Apr.* Vermont School Journal and Family Visitor. Montpelier.Established through efforts of V. S. T. A. \pm 1865.*May.* Literary Advertiser and Public School Advocate. Mount Pleasant, Iowa.Rev. S. S. Howe, editor. \pm October, 1860.*May.* The Educator. Pittsburgh.

Under auspices of the West Pa. T. A. Rev. Samuel Findley, editor. April, 1861, became Pennsylvania Teacher; issued simultaneously from Philadelphia and Pittsburgh.

July. Iowa School Journal. Des Moines.T. H. Benton, secretary, State board of education, editor. \pm September, 1862, united with Iowa Instructor.*July.* Southern Teacher. Montgomery, Ala.

Bimonthly; later became monthly. W. S. Barton, editor. Suspended in summer of 1864.

Aug. Tennessee Journal of Education. Richmond.

C. L. Randolph, editor. (Barnard.)

Oct. Iowa Instructor. Davenport.(Vol. II published at Tipton.) Published by committee of I. S. T. A. consolidated September, 1862, with Iowa School Journal, the resulting periodical carrying both names for several years; published at Des Moines after 1862; edited by committee of I. S. T. A. until August, 1870; name changed to Iowa School Journal, then to Common School. \pm 1877.*Nov.* The Educator. Baltimore.J. N. McGilton, editor. \pm 1859.

1860.

National Educator. Pittsburgh.

E. Curry, editor.

National Educator.

Quakertown, Pa., 1860-1863; Williamsport, 1863-1872; Kutztown, 1872-1877; Allentown, 1877-1906. Issued semi-monthly most of the time. A. R. Horne, editor, 1860-1906. ± • 1906.

1861.

Jan. Home and School. St. Louis.

J. L. Tracy, editor. Conducted a few months; the editor had been in charge of the Missouri Educator until its suspension. ± May, 1861.

1863.

July. California Teacher. San Francisco.

Established by State Education Society; edited by State superintendents and supported by State, the society electing editors until 1872; removed to Sacramento, 1873. ± April, 1876.

1864.

Jan. American Educational Monthly. New York.

Schermernhorn, Bancroft & Co., publishers. ± December, 1874.

Jan. Kansas Educational Journal.

Leavenworth, 1864-1865; and 1872-1874; Grasshopper Falls, 1866; Topeka, 1867 and 1871; Emporia, 1868-1870. Established by K. S. T. A., H. D. McCarty and 12 associate editors in charge. Sent at State expense to school officers, suspended when appropriation ceased. ± April, 1874.

Apr. School and Family Visitor. Louisville.

W. N. Hallmann, editor. Official organ of State superintendent. ± September, 1864.

July. Maryland School Journal. Hagerstown.

J. P. Harman, publisher. ± • June, 1865.

* 1864. **News and Educator.** Cincinnati.

John Hancock, editor until February, 1867. Name became Educational Times, January, 1867. ± • May, 1867.

1865.

Aug. Teacher and Pupl. Maysville, Ky.

H. Turner, editor. "Commended" by K. S. T. A. to which considerable space is given. ± Near close of 1865.

1866.

Jan. Michigan Teacher.

Niles, 1866; 1871-1874; Ypsilanti, 1867-1868; Adrian, 1869-1870. Official organ of M. S. T. A. and State superintendent of schools during first several years though independent. W. H. Payne, editor, 1866-1870; H. A. Ford, 1871-1876.

Nov. Maine Normal (Maine Journal of Education).

Farmington to August, 1868; Portland. Edited by George M. Gage of State Normal School during first two volumes; January, 1869, became Maine Journal of Education, organ of M. S. T. A., edited by board appointed by association. ± 1874, becoming part of New England Journal of Education.

New Orleans Advocate and Journal of Education. New Orleans.

State superintendent of schools, editor. ± • 1871. Political as well as educational.

1867.

May. Maryland Educational Journal. Baltimore.

E. S. Zevely, editor. ± April, 1868.

June. Minnesota Teacher and Journal of Education. St. Paul.

First volume and most of second issued from Mantorville. Established at Mantorville by county superintendent as a local journal. ± Merged with Chicago Teacher, June, 1875.

Sept. School Monthly. Milwaukee.

Published by Milwaukee teachers. ± • 1867.

Teachers' Advocate. Johnstown, Pa.**School and Fireside.** Louisville, Ky.

Bradley and Gilbert, publishers. ± • 1867.

1868.

Sept. Journal of Education (American Journal of Education) called "American" Journal of Education after December, 1871. St. Louis.

J. B. Merwin, editor, 1868-1893; associate editors at various times were the State superintendent of Missouri, the presidents of three Missouri State normal schools; represented officially several western State departments of education for short periods; published from the first in connection with school supply house; cooperative, with editions in most of the southwestern States. Continued, 1916, at Milwaukee.

Oct. National Normal. Cincinnati.

R. H. Holbrook, editor. Merged with Ohio Educational Monthly, November, 1874; revived under name Normal Exponent, November, 1882. Again united with Ohio Educational Monthly, 1893.

Schoolmaster (Chicago Schoolmaster, Illinois Schoolmaster).

Bloomington, 1868, to July 1870; published at Chicago and Normal and called Chicago Schoolmaster, 1871-January, 1873. Combined with Illinois Teacher as Illinois Schoolmaster, January, 1873. Conducted largely by teachers of Illinois Normal University. ± December, 1876.

Southern Journal of Education, Shelbyville, Ky.

J. T. Hearn, editor.

1869.

Jan. Indiana Teacher. Indianapolis.

A. C. Shortridge, G. P. Brown, W. A. Bell, editors. ± June, 1869. Consolidated with Indiana School Journal, Bell becoming editor.

Nov. Educational Journal of Virginia. Richmond.

Organ of educational association, edited by their committee; official department maintained by State superintendent, 1870-1891; received State appropriations, 1870-1891. ± December, 1891, continued as Virginia School Journal. Continued, 1916.

Western Educational Review. St. Louis.

Mentioned as organ of State board of education. O. H. Feathers, editor.

(Yale) College Courant. New Haven, Conn.

C. C. Chatfield, editor. Devoted to secondary and collegiate education. ± 1874. One of the periodicals consolidated in the New England Journal of Education.

Educational Gazette. Philadelphia.

C. H. Turner, publisher. ± 1870.

1870.

Jan. Arkansas Journal of Education. Little Rock.

Established by Thomas Smith, State superintendent. Issued as newspaper, 1870; magazine monthly, 1871, 1872, as organ of State superintendent. ± January, 1873.

Oct. National Teacher. Columbus, Ohio.

E. E. White, editor. Issued as a "national edition" of Ohio Educational Monthly. ± 1875 at close of Vol. V.

Amerikanische Schulzeitung. Milwaukee.

Organ of German-American Teachers' Association. Published at Louisville, Ky., until 1874; W. N. Hallmann, editor, 1870-1880 with various associates. Became Erziehungsblaetter, June, 1875; continued, ± 1900-

School Chronicle. Pittsburg.

± 1870.

1871.

Jan. Public School Journal (School Journal). New York.

Weekly. Published by E. L. Kellogg & Co. Continued, 1916.

Feb. Mississippi Education Journal. Jackson.

H. T. Fisher, editor, succeeded July, 1872, by H. R. Pease, State superintendent of schools. ± 1872.

Mar. School Laboratory. Iowa City.

Quarterly. Gustave Hinrichs, editor. Devoted to laboratory instruction. ± December, 1872.

Apr. Alabama Journal of Education. Montgomery.

Joseph Hodgson, State superintendent, editor. Succeeded after a few months by the Advance, a political weekly.

1871.

Aug. The Manual. Keokuk.

Edited by C. M. Greene. ± Combined with Iowa School Journal, June, 1872.

Connecticut School Journal. New Haven.

Conducted by board of editors under direction of C. S. T. A. ± December, 1874. Merged in New England Journal of Education.

School Recorder. Russellville, Ark.

M. H. Baird, editor.

1872.

Jan. Home and School. Louisville, Ky.

J. P. Morton, publisher. ± December, 1876, consolidated with Educational Weekly, Chicago.

Jan. The School. Ypsilanti.

± 1876, combined with Educational Weekly.

Oct. West Virginia Educational Monthly. Parkersburg.

J. G. Blair, editor. ± 1879.

Nov. New York State Educational Journal. Buffalo.

O. R. Burchard, editor. An endeavor to unite the educational interests of the State in a periodical with one responsible editor assisted by six corresponding editors, appointed by N. Y. S. T. A., so chosen as to represent the six important school groups—public schools, high schools and academies, colleges, institutes, and school supervision. ± 1874, sold to School Bulletin.

1873.

Jan. Chicago Teacher. Chicago.

Several Chicago principals connected with its editorship. ± June, 1875; united with Minnesota Teacher to form Western Journal of Education.

Apr. The Educationist. Indianapolis.

A. C. Shortridge, G. P. Brown, editors. ± December, 1874, united with Indiana School Journal.

May. El Educador Popular. New York.

Semimonthly. Devoted to elementary and secondary education. Published under patronage of president of Peru. Editor, N. Ponce de Leon. ± '1879.

May. Kindergarten Messenger. Cambridge, Mass.

Edited by Elizabeth Peabody, 1873-1875; continued as page in New England Journal of Education, 1876; original editor in charge, 1877. ± December, 1877; united with New Education, 1878.

July. Nebraska Teacher. Beatrice.

C. B. Palmer, editor. Organ of State superintendent and N. S. T. A. ± '1877.

1874.

Jan. Northern Indiana Teacher. South Bend.

Henry A. Ford, editor. ± June, 1876.

Jan. Tennessee School Journal. Nashville.

Official organ of State superintendent, who was editor, assisted by four associates appointed by T. S. T. A. ± '1875.

Sept. School Bulletin and New York State Educational Journal. Syracuse.

C. W. Bardeen, editor, 1874— School Room published as adjunct, 1881-1886. Continued, 1916.

Nov. National Teachers' Monthly. New York.

Called Barnes Teachers' Monthly after third volume. A. S. Barnes & Co., publishers. ± October, 1881.

North Carolina Journal of Education. Raleigh.

Stephen D. Pool, editor.

Journal of Education. Selma, Ala.

E. H. Saltiel, editor. ± 1874.

Maryland School Journal. Baltimore.

M. A. Newell, editor. ± '1879.

1875.

Jan. Educational Notes and Queries. Salem, Ohio.

W. D. Henkle, editor. ± December, 1881.

1875.

Jan. New England Journal of Education. Boston.

Weekly. Formed as union of Maine Journal of Education, Massachusetts Teacher, Rhode Island Schoolmaster, Connecticut School Journal, and College Courant. T. W. Bicknell, editor to 1886; A. E. Winship, 1886- Continued, 1916.

Mar. Brooklyn Journal of Education. Brooklyn.

John Y. Culyer, editor. After January, 1876, called Journal of Education of New York. ± March, 1876.

July. Utah Educational Journal. Salt Lake City.

J. M. Coyner, editor. The only educational journal in 10 territories, whose interests it was planned to serve through correspondents in each. ± June, 1876.

July. Western Journal of Education. Chicago.

Formed by union of Minnesota Teacher and Chicago Teacher. ± 1876.

Public School Record. Milwaukee.

Winchell and Whitaker, editors. ± 1875; to some extent continued for brief period as Western edition of School Bulletin of Syracuse, N. Y., called School Bulletin and Northwestern Educational Journal.

American Educator. Lockport, Ill.

Cooperative periodical, with several editors. ± 1881.

B. LIST INCLUDING THE MORE IMPORTANT EDUCATIONAL PERIODICALS ESTABLISHED 1876-1900.

1876.

July. Eclectic Teacher and Kentucky School Journal. Carlisle, Ky.

Louisville. 1879-1880; Lexington, 1881- Associate editors in several southern States. "The only educational journal south of the Ohio River." (1877.) ± February, 1883.

Public School Journal. Cincinnati.

Began as grangers and teachers' paper called Harvest Home Magazine; educational and called Public School Journal, 1880- F. E. Wilson, editor, 1876-1896.

• 1876. Educational Voice. Pittsburg.

Became Educational Review, 1881, consolidating several local publications. Published by an association of teachers. ± 1884.

1877.

Jan. Educational Weekly. Chicago.

Formed by union of School Bulletin and Northwestern Journal of Education, Michigan Teacher, Illinois Schoolmaster, Nebraska Teacher, Home and School, School Reporter, and School of Ypsilanti. Western Educational Journal conducted as monthly edition. ± 1881, changed to Present Age and Educational Weekly.

Jan. New Education.

Milwaukee, 1877-1880; Syracuse, N. Y., 1881-1882. W. N. Hallmann, editor. Called Kindergarten Messenger and New Education after first year. ± December, 1882.

Mar. Pacific School and Home Journal. San Francisco, Cal.

Albert Lyser, editor, 1877-1886. Official organ, 1879-1883. ± 1887.

Aug. Iowa Normal Monthly. Dubuque.

Established at request of State institute conductors; official organ of State department of education during first 10 or more years. ± 1912.

Oct. Primary Teacher (American Teacher, American Primary Teacher). Boston.

New England Publishing Co Continued, 1916.

Dec. Central School Journal. Keokuk, Ia.

W. J. Medes, editor and publisher. ± 1896.

Practical Teacher. Chicago.

Klein and Kimball, publishers until 1882; continued by the Teacher Publishing Company. Col. F. W. Parker became editor with September number, 1884. ± 1885. Name revived by E. L. Kellogg, of New York. "continuing a paper of same name begun by Col. Parker." New series, 1898- dated at Chicago and New York.

1878.

Nov. West Virginia Journal of Education. Morgantown.Weekly. J. R. Thompson, editor. \pm 1879.**American Kindergarten Magazine.** New York.Called *American Kindergarten and Primary Teacher*, 1886-1887; *Child Culture*, April, 1887. \pm August, 1887, continued as part of *Phrenological Journal*.**Literary Notes (School Work).** Kearney, Fairmount, Crete, Nebr.Conducted as literary, college, educational paper, with precarious support; J. N. Davidson, first editor; name changed to *School Work*, 1888. \pm 1885.**Teachers' Institute.** New York.E. L. Kellogg, publisher. Continued to 1906. Same publisher also conducted other method and supplementary journals, a. g., *Scholars' Companion*, 1877-; *First Teaching*, 1882-; *Professional Teacher*, 1889-.

1879.

Jan. Educationalist. Emporia, Kans.Successor of *The Hatchet*, a local school journal (December, 1877-November, 1878); became *Educationalist*, 1880, in charge of G. W. Hoss, formerly editor of *Indiana School Journal*; removed to Topeka; made official organ of K. S. T. A. \pm January, 1885. Interest transferred to *Western School Journal*.**Apr. Journal of Education.** New Orleans.

Established and conducted five years by Robert M. Lusher, State superintendent of schools, and William O. Rogers, city superintendent of New Orleans schools; and circulated chiefly among New Orleans teachers; continued by Rogers and associates, 1884-1888.

Journal of Education. Portland, Ore.Semimonthly. A. A. Bynon, editor. \pm 1881.

1880.

Jan. School Visitor.Ansonia, O., 1880-1884; Gettysburg, 1884-1892; Versailles, 1892-1894. John S. Royer, editor. Devoted to notes, queries, arithmetic, grammar, and examination questions. \pm December, 1884.**Aug. Texas Journal of Education.** Austin.Conducted by the secretary of State board of education. \pm December, 1882. Consolidated with *Texas School Journal*.**Sept. Education.** Boston.

Bimonthly, 1880-1884; monthly, 1885- T. W. Bicknell, editor, 1880-1885; W. A. Mowry, 1886-1891; Revs. F. H. Kasson and F. H. Palmer, 1891-1900. Continued, 1916.

Nov. Arkansas School Journal. Little Rock.Established as private venture; J. L. Denton, State superintendent, became editor during first year; 1882 called Kellogg's *Eclectic Monthly*. \pm July, 1888.**Michigan School Moderator.**Grand Rapids until 1886; Lansing, weekly, 1880-1884. Semimonthly. Called *Moderator Topics*, 1903- Henry E. Pattengill, editor, 1889- Continued.**Ohio Teacher.** Cambridge, O.Established as *Guernsey County Teacher*; called successively *East Ohio Teacher*, 1888, and *Ohio Teacher*; John McBurney, editor, 1880- Continued, 1916.* 1880. **Our Country and Village Schools.** Decatur. \pm November, 1887, consolidated with *County School Council*.

1881.

Jan. (Illinois) Schoolmaster (Intelligence). Chicago and Oak Park.Called *Schoolmaster* after first number; called *Intelligence* after May, 1884. Semimonthly. E. O. Valle, editor, 1881-1905. Includes many supplementary leaflets. \pm 1905.**North Carolina Educational Journal.** Chapel Hill.Established by N. C. S. T. A., but edited by Rev. J. F. Heitman. Issued at Trinity College, 1883-1885. \pm December, 1885.**May. Illinois School Journal (Public School Journal, School and Home Education).**"A vigorous Educational Magazine." Published at Normal, 1881-1886; Bloomington, 1886- Editors, Vols. I, II, E. J. James, Charles De Garmo; III, IV, V, various teachers in Illinois Normal University; Dr. George P. Brown, editor, 1880-1900, with various associates. Name changed to *Public School Journal* with Vol. IX, 1889; and again to *School and Home Education* with Vol. XVIII, 1898. Continued, 1916.

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1881.

Aug. Educational Record. Nashville and Tusculum.

Removed to Maryville, 1892. Official organ of State superintendent.
± January, 1883.

Nov. West Virginia School Journal. Wheeling.

Edited several years by superintendent and principals of Wheeling; after this chiefly by State superintendents. Continued, 1916.

Dec. Minnesota Journal of Education (Journal of School Education, School Education).

Published for time at St. Paul; Rochester; Minneapolis, 1887. Sanford Niles, editor, 1885-1895. Continued, 1916.

—— Public School. Boston.

± 1883, united with Primary Teacher; continued as American Teacher.

1882.

—— School World. Farmington, Me.

D. H. Knowlton, publisher, school supplies and supplementary material, publishing a pupils' edition; less supplementary and more professional material after 1900.

1883.

Jan. Texas School Journal. Houston.

Established by Texas Association of School Superintendents, edited by State superintendents several years; published at Dallas, 1887-1895; Austin, 1895. Continued, 1916.

Feb. California Teacher and Journal of Home Education, San Francisco.

Official organ, receiving State appropriation. ± February, 1887.

June. North Carolina Teacher. Raleigh.

Eugene Harrell, editor. ± September, 1895.

July. Educational Weekly. Indianapolis.

Published by J. M. Olcott, with about a dozen contributing editors.
± November 7, 1885, united with Journal of Education, Boston.

Oct. Missouri School Journal. Jefferson City.

First editors, W. T. Carrington and J. L. Holloway; H. A. Gass, editor, 1891-1916; unofficially conducted by officers of State department of education. Continued, 1916.

—— Southwestern Journal of Education. Nashville.

Combined with Progressive Teacher of New Orleans and published under that name at Nashville. Continued, 1916.

1884.

Jan. Lehrer-Post. Milwaukee.

Official organ of German-American Teachers' Association, after September, 1889; used as supplementary reading before this time.

Jan. Educational Courant. Louisville, Ky.

Official organ of Kentucky State Teachers' Association and of State board of education. R. H. Carothers editor, except of first few numbers. ± July, 1894, became part of Southern School.

—— Arkansas Teacher. Little Rock,

First numbers issued from Russellville. J. H. Shinn, editor. Continued two years.

1885.

Jan. Dakota School Journal. Blunt, S. Dak.

Began as weekly; monthly. Henry Hoffman, editor.

Jan. Educational Gazette. Rochester, N. Y.

A. P. Chapin, editor. ± 1910.

Jan. Educational News. Harrisburg, Pa.

Weekly, 1885-1898; semi-monthly. A. N. Raub, editor. Removed to Philadelphia, 1891; to Newark, Del., 1897. ± 1900.

Feb. Western School Journal. Topeka, Kans.

H. C. Speer, editor, 1885-1887; R. W. Turner, 1887-88; John MacDonald, 1888-1916. Continued, 1916.

May. Colorado School Journal. Denver.

Aaron Gove, superintendent of Denver schools, editor, 1885-1903. Continued, 1916.

1885.

May. Carolina Teacher. Columbia, S. C.

W. L. Bell, editor. Official organ of State department of education. ± '1889.

— Alabama Teachers' Journal. Montgomery.

Official organ of State superintendent and Alabama State Teachers' Association. Resident editor and 12 associates. ± March, 1890, consolidated with Educational Exchange.

* 1885. Popular Educator. Boston.

Educational Publishing Co. Continued, 1916.

1886.

Feb. Academy.

Syracuse, N. Y., 1886-1890; Boston, 1890-1892. Published under the auspices of the Associated Academic Principals of the State of New York. George A. Bacon, editor. ± June, 1892.

Feb. Progressive Teacher. New Orleans.

H. E. Chambers, editor. ± June, 1889, sold to Southwestern Journal of Education of Nashville, but continued as Progressive Teacher at Nashville, 1900 and 1916.

Nov. Science and Education. New York.

± 1887.

— Georgia Teacher. Atlanta.

V. E. Orr, editor and publisher most of the time. Conducted in connection with school supply house. Contents of Volumes III, IV, and V identical with those of Florida School Journal of same years, except for a few local notes. ± '1895.

Iowa School Journal (Iowa Schools, Midland Schools). Des Moines.

Closely identified with work of State superintendent, '1890-'1900. Name became Iowa Schools, March, 1893, at the same time several local Journals were united with Iowa Schools. Name became Midland Schools, April, 1896. Continued, 1916.

Iowa Teacher. Charles City.

A cooperative publication with many county editions. ± '1910.

Journal of Industrial Education. Chicago.

Mrs. Frances E. Owens, editor. Continued about five years.

Northwest Teacher. Olympia, Wash.

L. E. Follansbee, editor. ± '1890.

School Gazette. Harrisburg, Pa.

Weekly for a short time, 1886-1890. ± '1910.

* 1886. Midland School Journal. Madison, Wis.

± December, 1890, united with Wisconsin Journal of Education.

1887.

Jan. Common School Education. Boston.

William A. Mowry, editor. ± June, 1891, merged with Teachers' World of New York.

Feb. Pacific Educational Journal. San Francisco.

Oakland, 1892-1896. Official organ receiving State appropriation. J. B. McChesney, principal of Oakland High School, editor, 1887-1891; P. M. Fisher, editor, 1891-1896. ± June, 1896.

June. School News and Practical Educator. Taylorville, Ill.

Began as Christian County School News; soon changed name as circulation expanded. C. M. Parker, editor, 1887-1916. Continued, 1916.

July. County School Council. Chicago.

"Devoted to supervision and general interests of common schools." November, 1887, absorbed Our Country and Village Schools, adding this name to its title. ± Combined with Public School Journal of Bloomington, September, 1889.

Nov. Mississippi Teacher. (Meridian) Oxford.

Organ of M. S. T. A. ± '1890.

Florida School Journal.

Established at Lake City by H. Mers. More or less under direction of F. S. T. A. until 1890; after this published by V. E. Orr of an Atlanta school supply house. ± '1895.

1887.

Nov. Journal of Pedagogy. Athens, Ohio.

Quarterly. Edited by college and university men in early volumes, Albert Leonard, editor, with associates. Continued at Syracuse, N. Y., Binghampton, N. Y., and Ypsilanti, Mich., in succession. \pm 1907.

School Teacher. Winston, N. C.

Became Southern Educator, Durham, August, 1890. \pm November, 1892.

* 1887. Southern Teacher. Chattanooga.

\pm July, 1894; consolidated with Southern School, Lexington, Ky.

1888.

Jan. Southern Illinois Teacher.

Carbondale, Metropolis and Collinsville. Established as the Normal Gazette, a college paper; changed name to represent its field. \pm 1894.

May. The Kindergarten. Chicago.

Called Kindergarten Magazine after September, 1891. First editors, Cora L. Stockham and Emily A. Kellogg. \pm 1910.

June. Dakota Educator. Scotland, S. D.

George A. McFarland, first editor; official organ of S. D. S. T. A., 1890; removed to Madison, 1890; continued as South Dakota Educator at Mitchell. H. L. Bras, editor, 1891—Continued, 1916.

Sept. Georgia Educational Journal. Atlanta.

\pm December, 1891, consolidated with Educational Monthly.

Louisiana Educator. Baton Rouge.

Organised in connection with Chautauqua movement and approved by L. S. T. A. T. Sambola Jones, editor, 1888, aided by 10 associates, 1889—1890. \pm 1890.

The Teacher (New Education). New York.

Edited by Mary H. Simpson and nine associates. December, 1892, succeeded by New Education. \pm 1909.

1889.

Apr. Alabama Educational Exchange.

Birmingham, 1889—1890, 1895—. Published at Montgomery, 1890—1895. J. H. Phillips and J. M. Dewberry, editors most of the time. Continued, 1916.

Sept. School. New York.

Weekly. H. S. Fuller, editor. Continued, 1910.

Sept. Texas Journal of Education. Galveston.

\pm May, 1891, united with Texas School Journal.

Common School. Grafton, N. D.

A. L. Woods, W. L. Stockwell, editors. \pm 1900.

Educational Foundations. New York.

E. L. Kellogg, publisher. Continued, 1910.

Germania.

Manchester, N. H., 1889—1894; Boston, 1894. A. W. and E. Spanhoef, editors and publishers. (Same publishers also conducted Student, 1896—.) \pm 1900.

Home and School. Louisville Ky.

\pm December, 1893, united with Southern School at Lexington, Ky.

Northwest Journal of Education. Seattle, Wash.

First volumes dated also at Helena, Mont. Published, 1895, at Olympia. Continued, 1916 at Seattle.

Teachers' World. New York.

Began as local journal in Ohio; combined with Common School Education, 1891; became, June, 1892, Teachers' World, "A Journal of Methods, Aids, and Devices." 1902, united with Normal Instructor.

* 1889. Southern School. Lexington, Ky.

Weekly, 1890—1900. Continued, 1916.

* 1889. Oregon School Journal (continued as Western Pedagogue). Corvallis, Oreg.

\pm 1893.

1890.

American School Board Journal. Milwaukee.

W. G. Bruce, publisher. Continued, 1916.

Northwestern Journal of Education. Lincoln.

J. H. Miller, editor. ± September, 1898, Nebraska edition sold to Nebraska Teacher, continued as Northwestern Monthly, 1900.

Primary School. New York.

E. L. Kellogg, publisher. ± '1905.

Southern School Journal. Little Rock, Ark.

Weekly during 1891. Established as successor of Popular Educator and Arkansas Educational Journal, local publications. Edited by J. H. Shinn, State superintendent, 1890-1894, aided by his successor in office, 1895-1896, assisted by local school men.

1891.

Jan. Pedagogical Seminary. Worcester, Mass.

Quarterly. G. Stanley Hall, editor, 1891- Continued, 1916.

May. Oklahoma School Journal. Guthrie.

Frank Terry, editor. Designed as official organ by territorial superintendent. Eight numbers issued. ± January, 1892.

May. Wyoming School Journal. Laramie.

Henry Mers, editor. ± June, 1893.

Sept. Interstate School Review. Danville, Ill.

Weekly, 1896-1900. A cooperative paper with numerous county editions. Several Chicago principals named as editors at different times. ± '1911.

Sept., Pacific Coast Teacher. San Jose, Cal.

John Jury and Franklin Barthol, editors. After absorbing the San Jose Normal Index was official alumni organ of that school. ± August, 1893.

Nov. Normal Instructor. Dansville, N. Y.

F. A. Owea, publisher. Continued, 1916.

Dec. Educational Monthly. Atlanta, Ga.

Established as consolidation of Georgia Educational Journal and Piedmont Educator (local). First volume numbered V. ± February, 1893, continued as Southern Educational Journal, q. v.

American School and College Journal. St. Louis.

J. B. Merwin, editor. Continued, 1900.

Educational Review. New York.

Nicholas Murray Butler with associates, editor, 1891-1896; Nicholas Murray Butler, editor, 1897- Continued, 1916.

Kindergarten Review. Springfield, Mass.

Milton Bradley Co. Continued, 1916.

1892.

Jan. Primary Education. Boston.

Eva D. Kellogg, editor. Educational Publishing Co. Continued, 1916.

Jan. Scientific Temperance. Boston.

Issued by the Scientific Temperance Instruction Department, Woman's Christian Temperance Union. Mary H. Hunt, first editor. Called School Physiology Journal, 1893-1911; continued 1916 as Scientific Temperance.

Mar. School Commissioner. Saginaw, Mich.

Changed name and content several times; American School Commissioner, 1893; American Illustrated School Commissioner, 1895; American Schools, 1896; American Illustrated, 1896. ± '1896.

Nov. Oklahoma School Herald.

Norman, 1892-1897; Oklahoma City, 1897- W. N. Rice, editor, 1892- except for short intervals. Continued, 1916.

Dec. Cabinet. Detroit.

Began as official organ of Michigan Music Teachers' Association. Called School Record after 1893 and ceased to give special attention to music.

School and College. Boston.

"Devoted to Secondary and Higher Education." R. G. Huling, editor. ± Its general plan continued in School Review.

Western Teacher. Milwaukee.

S. Y. Gillan, editor, 1892- Continued, 1916.

1893.

Jan. Southern Educational Journal. Atlanta.

Semimonthly (1893-1896). Consolidation of several periodicals already united in the Educational Monthly. First volume is V. Edited by State superintendent of schools or under his direction. \pm 1907.

School Forum. Dallas.

\pm 1895, united with Texas School Journal.

School Review. Hamilton, N. Y.

J. G. Schurman, president of Cornell University, and C. H. Thurber, principal of Colgate Academy, first editors. Removed to Chicago, 1896. Continued, 1916.

1894.

Feb. Mississippi Journal of Education. Aberdeen.

M. Rose, editor. \pm 1895, united with Dixie School Journal to form Mississippi School Journal.

Mar. Florida School Exponent.

Published at Tallahassee two years; continued at Jacksonville. Official organ of State superintendent and F. S. T. A. Continued, 1916.

June. The Dixie School Journal. Waldo, Miss.

C. L. McKay, editor. Last four numbers issued from Philadelphia, Miss. \pm February, 1896, united with Mississippi Journal of Education to form Mississippi School Journal.

Journal of Pedagogy. Provo, Utah.

Published under auspices of the department of experimental pedagogy of Brigham Young Academy. \pm 1895.

Mind and Body. Milwaukee.

Continued, 1916.

1895.

Mar. Utah University Quarterly. Salt Lake City.

Official organ of the university, the State superintendent of schools, and the Natural History Association. \pm 1897.

Apr. Louisiana School Review. New Orleans.

Conducted as a cooperative feature of Louisiana Public School T. A. H. E. Chambers, editor. \pm 1907.

Aug. Inland Educator. Terre Haute.

Many contributors were teachers in Indiana State Normal School. \pm August, 1900, consolidated with Indiana School Journal as Educator Journal. Continued, 1916.

Child Study Monthly. Chicago.

\pm 1903.

Tennessee School Journal. Waverly.

\pm 1896, continued in Southwestern School Journal. Published 1897 at Birmingham, Ala., 1898-, Nashville. \pm 1902.

Western Journal of Education. San Francisco.

Harr Wagner, editor. Official organ sent to all school clerks, 1898. Continued, 1916.

 \circ 1895. Philadelphia Teacher. Philadelphia.

Continued, 1916.

1896.

Apr. Connecticut School Journal. Meriden.

Weekly. Official organ of State Teachers' Annuity Guild. \pm 1903.

Nov. Arkansas School Journal. Little Rock.

Conducted by State superintendent, 1897-98; continued by E. L. Gatewood, and W. J. McElwain, the latter employed by the State superintendent. \pm 1913.

American Physical Education Review. Cambridge, Mass.

Boston, 1897-. Quarterly. Continued, 1916.

Mississippi School Journal. Jackson.

Official organ of State department of education, State board of examiners, and organization of county superintendents. \pm 1913.

1897.

Apr. New York Teachers' Quarterly. New York.

Conducted by several teachers of New York City. ± December, 1898.

**Apr.* Mississippi Teacher. Jackson.

± 1905.

Sept. New York Education. Albany, N. Y.C. E. Franklin, editor. "Devoted to New York State educational interests."
Changed, 1901, to American Education. Continued, 1916.

Inland Journal. Lewiston, Idaho.

Edited by George E. and C. O. Knepper. ± '1899.

Journal of School Geography. Lancaster, Pa.

"Devoted to the interests of geography teachers." R. E. Dodge, editor.
Continued, 1900.

Modern Methods. Boston.

New England Publishing Co. A. E. Winship, editor. ± 1903.

North Carolina Journal of Education. Greensboro.

P. P. Claxton, editor. Continued, 1901.

Oregon Teachers' Monthly. Salem, Oreg.

Charles H. Jones, editor, 1897. Continued, 1916.

Teachers' Gazette. Milford, N. Y.

Continued, 1916.

1898.

Feb. Texas School Magazine. Dallas, Tex.

Continued, 1916.

Sept. Nebraska Teacher. Lincoln.

Official organ of N. S. T. A. Continued, 1916.

New York Teachers' Monographs. New York.

Quarterly. Conducted by New York City teachers. Continued, 1916.

1899.

Jan. New York Teachers' Magazine. New York.

Conducted by a group of teachers of New York City. Continued, 1900.

Apr. County Superintendents' Monthly. Fremont, Nebr.

For county superintendents. ± '1900.

May. Westland Educator. Fargo, N. Dak.

W. G. Crocker, editor, 1899- Continued, 1916.

Chicago Teacher. Chicago.

S. R. Winchell, publisher. ± '1910.

Manual Training Magazine. Peoria, Ill.

Quarterly. Continued, 1916.

1900.

Apr. School Music Monthly. Keokuk, Iowa.

Vol. I published at Quincy, Ill. Continued, 1916.

Sept. Journal of Adolescence. (Chicago.) Oak Park, Ill.A. H. Yoder, editor. United with Child Study Monthly. ± '1908. De-
signed to aid in the study of children between the ages of 12 and 18.

C. THE PERIODICALS IN THIS LIST WERE, AS A RULE, SHORT LIVED AND OF LOCAL CIRCULATION.

1875. School World. Chicago.

W. H. Gardner, editor and publisher.

1876.

Nov. The Educator. Muscoda, Wis.

Oregon Educational Journal. Salem.

* 1876. Carolina Teacher. Columbia, S. C.

± '1876.

* 1876. Rural Educationist. Pierce City, Mo.

W. M. Simpson, publisher.

- * 1876. *School Record*. Oak Ridge, Mo.
Stanley, editor.
- 1877. *New Jersey Public School Journal*. Bloomfield.
C. J. Majory, editor.
- 1879. *Educator*. New Haven, Conn.
Parents' and Teachers' Monthly. Lexington, Ky.
C. C. Cline, C. P. Williamson, G. W. Yancy, editors.
Public School Record, San Francisco.
Weekly. Georges Francfort, editor.
School World. St. Louis.
C. H. Evans, editor.
Teachers' Journal. Wilkes-Barre.
A. H. Berlin and J. C. Geyer, editors.
Western Educational Journal. Chicago.
J. Fred Waggoner, editor. ± 1888. Chiefly a school supply journal.
- 1880. *Journal of Didactics*. Paola, Kans.
W. J. Groat, editor. Prof. John Wheeler, associate editor. ± 1880.
Missouri Teacher. Kirksville, Mo.
J. U. Barnard, editor and publisher. ± 1882.
- * 1881. *School Register*. Everett, Pa.
± August, 1882.
- 1882. *Educational Journal*. Jackson (Durant), Miss.
Semimonthly. P. W. Carr, editor. ± 1882.
Iowa Teacher. Marshalltown.
Marvin, Morrissey, publishers. ± 1886.
- 1883. *Educator*. Effingham, Ill.
J. A. Arnold, editor and publisher. ± 1883.
- 1884. *Educational Herald*. Louisville, Ky.
School Messenger. Ada, La.
G. H. Harvill, editor and publisher.
True Educator. South Lancaster, Mass.
Charles E. Ramsey, editor.
- * 1884. *Northwestern School Journal*. Council Bluffs, Iowa.
Weekly. George D. Osborn, editor. ± May, 1886.
- * 1884. *Western Educator*. Parker, S. Dak.
C. H. Smith, editor. Edition also at Lincoln, Neb.
- 1885. *American School*. Henderson, Ky.
National Educator. Springfield, Peoria, Ill.
New Jersey Public School Journal. Flemington.
Leigh, editor.
Normal Educator. Monmouth, Oreg.
School Music Journal. Boston.
The Educational Gleaner. Unionville, Mo.
J. W. Jones, editor
- * 1885. *Dakota Teacher*. Huron, S. Dak.
Bishop and Patterson, editors.
- 1886.
Nebraska Teacher. Salem.
± 1887, absorbed by *Western School Journal of Kansas*.
Our Schools. Mayfield, Ky.
Texas Public Schools. Fort Worth.
Semimonthly.

1887.

Educational Advocate. Collinsville, Ala.**Educational Advocate. Dublin, Ga.**

± 1891.

Normal Instructor. Rome, N. Y.

± 1889.

Practical Educator. Oskaloosa, Iowa.**Fred A. Wightman, editor.****Southern School Journal. Walnut Grove, Miss.**

± * 1894.

The School. Springfield, Mass.

± * 1890.

Western North Carolina Journal of Education. Glenwood.

± * 1890.

* 1887. **School Journal. Elkhorn, Wis.****A. O. Wright, editor. ± 1888, united with Midland Schools.**

1888.

Jan. Nebraska Teacher. Carleton.**W. H. Sublette, editor. ± * 1888.****Nebraska School Journal. Schuyler.****A. B. Hughes and W. F. Howard, editors.****New Education. Daleville, Miss.****Thomas F. McBeath, editor. ± 1889.*** 1888. **Piedmont Educator. Georgia.*** 1888. **Teacher at Work. Huntsville, Ala.**1889. **Arkansas Educational Journal. Searcy.**

± 1890.

Mountain Educator. Marshall, Ark.**J. W. Blankinship, editor and publisher.****Popular Educator. Little Rock.**

± 1890.

School Bulletin. Birmingham, Ala.**Weekly. ± 1889.****Teachers' Guide. Haynesville, Ala.**

± 1890.

1890.

Kentucky State Journal of Education. Falmouth, Ky.**Teachers' Journal. Springfield, Vt.**

± * 1891.

Western Reserve School Journal. Geneva, Ohio.

± 1893.

* 1890. **Palmetto Teacher. Greenwood, S. C.****P. E. Rowell, editor.**

1891.

Jan. California Educational Review. San Francisco.**Campbell and Lyser, editors. ± June, 1891.****June. California Public School Journal.**± June, 1891, the editor becoming editor of **Pacific Educational Journal.****Inter-Mountain Educator. Salt Lake, Utah.****W. A. Corey, editor.****North Carolina Journal of Education. Fairview.****D. W. Furman, editor.****Progressive School. Alliance, Ohio.**

± 1892.

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1891.

June. Public School Mirror. Morgantown, W. Va.

Published at Huntington, 1896. \pm 1897.

Schoolmaster. Des Moines.

School News. Norwich, Conn.

Dixon, editor.

1892.

Jan. Southern Education. Florence, Ala.

J. K. Powers, editor. Sold to Educational Exchange. \pm December, 1892.

Apr. West Virginia Educational News. Charleston.

\pm 1892.

American Educator. (York) Lincoln, Nebr.

G. H. Graham, editor. \pm 1897, united with Midland Schools, Iowa.

Educational Worker. Springville, Ala.

\pm 1892.

Florida Teacher. Dade City.

A. E. Booth, editor.

Missouri Teacher (Central Teacher) Sedalia.

R. M. Scotten, editor and publisher. \pm 1895.

1893.

Looking Ahead. Mansfield, La.

Official organ of L. S. T. A. G. D. Pickels, editor. \pm 1894.

School Courant. Freeport, Ill.

1894.

Washington Educational Review. Tacoma.

W. N. Allen, Herbert Bashford, editors.

Western School News. North Yakima, Wash.

Clark, editor and publisher.

1895.

Arizona Educator. Jerome.

Later published for short time at Kingman. \pm 1896.

Directors' Round Table. Iowa Falls, Iowa.

Primary Teacher. Litchfield, Ill.

Edna C. Holbrook, editor.

1896.

School Register. Worcester, Mass.

\pm 1911.

Teacher and Student. Chicago.

S. R. Winchell, editor.

1897.

Educational Courier. Poplarville, Miss.

Progressive School. Wooster, Ohio.

School Economy. Chicago.

Orville Brewer, editor.

Teacher. Brooklyn, N. Y.

I. N. Smith & Co., editors and publishers.

1898.

Carolina Teachers' Journal. Greenwood, S. C.

1900.

School Weekly. Chicago.

James J. Sayer, editor. Chicago School Publishing Co., publishers.

1899.

Jan. Home and School. Lexington, Ky.

Formerly Southern School.

Mar. Georgia Education. Atlanta.

Semimonthly. Miss S. Y. Jewett, editor.

1899. Teachers' Outlook. New York.

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- Academician. New York. Vol. I, 1818.
 Alabama Educational Journal. Montgomery. Vol. I, 1858.
 Alabama Journal of Education. Montgomery. Vol. I, 1871.
 American Educational Monthly. New York. Vols. I-XI, 1864-1874.
 American Educationist and Western School Journal. Cleveland. Vol. I, 1852.
 American Journal of Education and College Review. New York. Vols. II-III, 1856-1857.
 American Quarterly Register. Andover, Mass. Vols. I-XV, 1829-1843.
 American School Board Journal. Milwaukee. Vol. XX, 1900.
 Brooklyn Journal of Education. Brooklyn. Vol. I, 1875.
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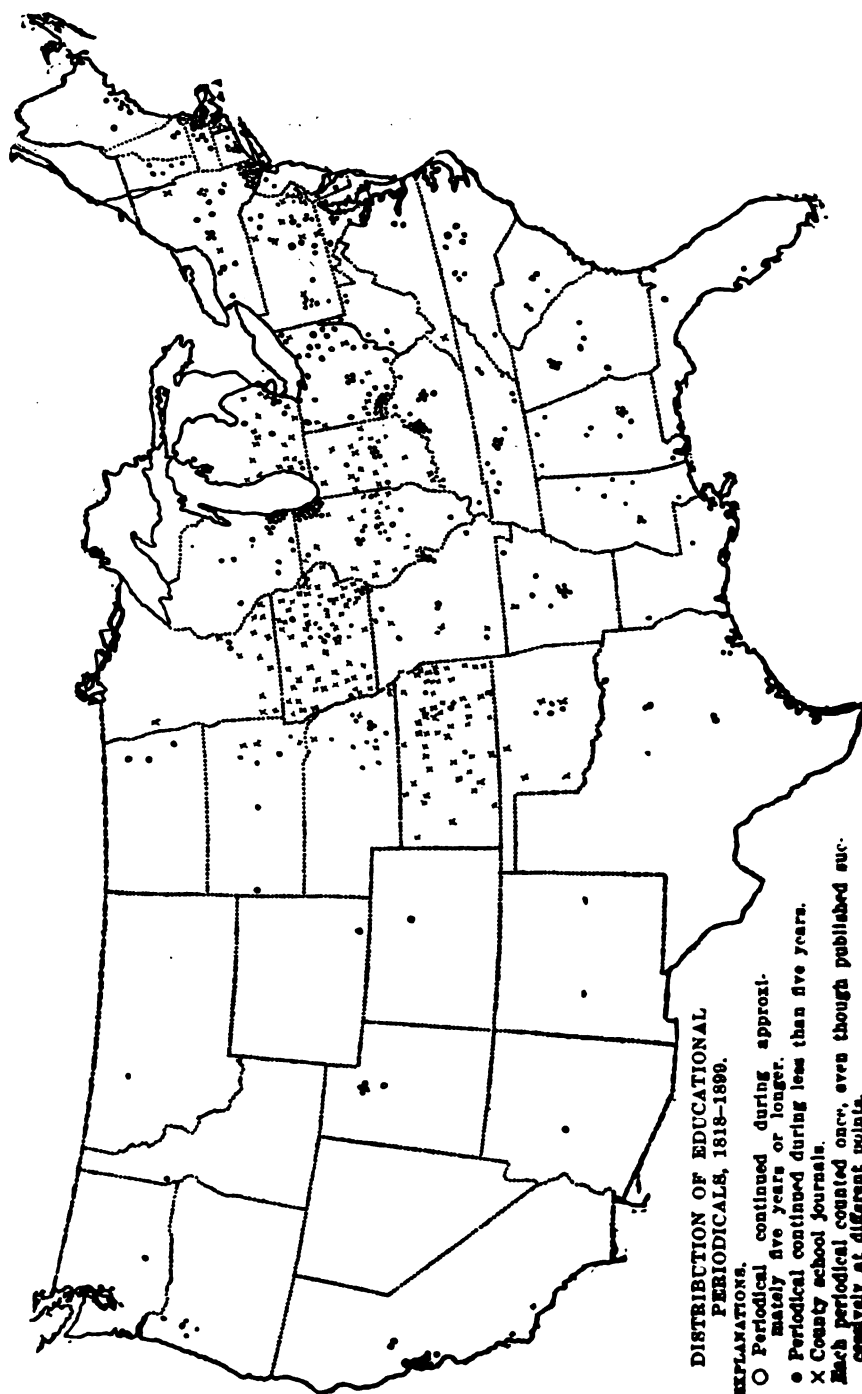
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DISTRIBUTION OF EDUCATIONAL
PERIODICALS, 1818-1899.

EXPLANATIONS.

- O Periodical continued during approxi-
mately five years or longer.
- Periodical continued during less than five years.
- X County school journals.

Each periodical counted once, even though published suc-
cessively at different points.

LIST OF EDUCATIONAL PERIODICALS PUBLISHED IN MAY, 1917.

The following descriptive list includes the educational periodicals published in May, 1917. It is arranged in two groups, the first including those of local or chiefly local interest and circulation; the second, those which are specialized to a considerable extent. The complete list thus divided shows a continuation of the specializing tendency noted before 1900. As to frequency of issue, more than half are published in 10 monthly numbers. Most statements of auspices or official relationships are quoted; in many cases these amount to little more than the name; in others actual ownership or control is indicated, examples being the journals published by the Illinois, Kansas, and Colorado State teachers' associations. Reports of State teachers' associations, issued quarterly or monthly, and the periodical form of the reports of the National Education Association have not been included, since their content is almost entirely confined to the affairs of the associations. Periodical bulletins conducted by State departments of education have also been omitted. In general, the basis of selection stated in the introduction to the study has been used in preparing this supplementary list.

The journals in the local list usually represent varied interests—school news, State laws and decisions relating to schools, reports of educational gatherings, discussions of method and teaching problems by local contributors, and many articles quoted from the bulletins of the United States Commissioner of Education or from State reports. Some emphasize method and device material of value to grade or rural teachers; others contain little except current educational news and miscellaneous comment and reprints from other journals. Usually the names of those in the specialized group sufficiently suggest their major interest. In the case of a few whose character is not thus indicated, parenthetical expressions such as "method," "school news," or similar notes have been used. A small number of county school journals has been found, but they are not given a place in the lists.

(A) LOCAL AND STATE EDUCATIONAL PERIODICALS.

Periodical and place of publication.	Editor and publisher.	Issues per year.	Price per year.	Auspices.
Educational Exchange, Birmingham, Ala.	N. R. Baker.....	12	\$1.00	
Arizona Teacher, Tucson, Ariz.	I. Colodny.....	10	1.00	"Official organ of Arizona S. T. A."
Arkansas Teacher, Conway Ark.	J. J. Doyme: Arkansas Teacher Publishing Co.	10	1.00	
Sierra Educational News, San Francisco, Calif.	Arthur Chamberlain: California Teachers' Association.	10	1.50	"Official organ of California Teachers' Association."
Western Journal of Education, San Francisco, Calif.	Harr Wagner.....	12	1.50	
Colorado School Journal, Denver, Colo.	D. R. Hatch: Colorado State Teachers' Association.	12	1.00	"Owned by Colorado Educational Association."
Public Schools, Denver, Colo.	William Ruffer.....	10	1.00	
Florida Schoolroom, Dade City, Fla.	Allys M. Corr: P. W. Corr..	12	1.00	"Official organ of Florida Educational Association, State dept. of education."
School and Home, Atlanta, Ga.	E. C. Merry: School and Home Publishing Co.	12	.75	
Illinois Teacher, Bloomington, Ill.	Illinois S. T. A.....	10	.....	"Organ of Illinois S. T. A."
Practical School Journal,ITCHFIELD, Ill.	E. B. Lewis.....	10	1.10	
School and Home Education, Bloomington, Ill.	W. C. Bagley: Public School Publishing Co.	10	2.00	
School Century, Oak Park, Ill.	George W. Jones.....	10	1.25	(Method.)
School News and Practical Educator, Taylorville, Ill.	—: C. M. Parker Estate.	11	1.25	De.
Educator-Journal, Indianapolis, Ind.	Geo. L. Roberts: Educator-Journal Publishing Co.	12	1.00	
Home and School Visitor, Greenfield, Ind.	James N. Goble: D. H. Goble Printing Co.	12	.75	
Indiana Instructor, Indianapolis, Ind.	D. T. Fraigg: Instructor Publishing Co.	12	1.00	
Teachers' Journal, Marion, Ind.	A. Jones: Teachers' Journal Co.	12	1.00	
Midland, Schools, Des Moines, Iowa.	C. R. Scroggie: Midland Schools.	10	1.00	
Kansas Teacher, Topeka, Kans.	F. L. Pinet (secretary): Kansas S. T. A.	12	1.00	"Official organ of Kansas S. T. A."
Southern School Journal, Lexington, Ky.	R. S. Eubank.....	12	1.00	"Official organ of State board of education and Kentucky Educational Association."
Louisiana School Work, Zachary, La.	E. L. Stephens: C. B. Reagan.	10	1.00	"Official organ of State board of education and Louisiana S. T. A."
Atlantic Educational Journal, Baltimore, Md.	H. E. Buchholz: Maryland Educational Publishing Co.	10	1.25	
Elementary Teacher, Baltimore, Md.	Mollie R. Hobbs: Elementary Teachers' Association.	10	.80	"Official organ of the League of Teachers' Associations."
American Schoolmaster, Ypsilanti, Mich.	Horace Z. Wilbur: Michigan State Normal College.	10	1.00	
Moderator-Topics, Lansing, Mich.	H. R. Pattengill.....	10	1.50	
School Education, Minneapolis, Minn.	Herbert U. Nelson: School Education Publishing Co.	9	1.25	
Mississippi Educational Advance, Jackson, Miss.	H. L. McClesky: Educational Advance Co.	10	1.00	"Official organ of the State department of education and Mississippi Teachers' Association."
Missouri Journal of Education, Kansas City, Mo.	Foster W. Gary: Missouri Journal of Education.	35	1.00	
Missouri School Journal, Jefferson City, Mo.	T. J. Walker: Missouri School Journal Publishing Co.	10	1.00	"Official organ of State department of education."
Inter-Mountain Educator, Missoula, Mont.	Morton J. Elrod: Inter-Mountain Educator Co.	10	1.00	"Official organ of Montana S. T. A. and Montana Library Association."
Middle West School Review, Omaha, Nebr.	H. M. Eaton: Middle West School Review.	10	1.25	

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(B) EDUCATIONAL PERIODICALS DEVOTED TO SPECIAL FIELDS.

Periodical and place of publication.	Editor and publisher.	Issues per year.	Price per year.	Auspices
American Journal of School Hygiene, Worcester, Mass.	L. E. Averill.....	10	\$1.50	
American Penman, New York, N. Y.	A. N. Palmer Co.....	12	1.00	
American Physical Education, Springfield, Mass.	J. H. McCurdy; American Physical Education Association.	9	3.00	"Official organ of American Physical Education Association."
American School Journal, Milwaukee, Wis.	Carroll C. Pearse; American School Publishing Co.	12	1.50	
American School Journal, Milwaukee, Wis.	Wm. C. Bruce; Bruce Publishing Co.	12	1.50	
Aus Nuh und P., Chicago, Ill.	Arthur G. Merrill; Francis Parker School Press.	4	.70	
Bird Lore, New York.	M. Chapman; D. C. Chapman; D. C. Chapman.	6	1.00	"Official organ of Audubon Societies" (contains school department).
Business Educator, Columbus, Ohio.	Commoner and the Chicago Press.	10	1.00	
Child Welfare Magazine, Philadelphia, Pa.	Commoner and the Chicago Press.	12	1.00	
Classical Journal, Chicago, Ill.	A. Estoelet; Philadelphia Publishing Co.	9	2.50	"Official organ of the National Congress of Mothers and Parent-Teacher Associations."
Choses et Autres, Philadelphia, Pa.	Josephine Turk Correct English Publishing Co.			"Classical Association of the Middle West and South with the Cooperation of the Classical Associations of New England and the Pacific States."
Correct English; How to Use It, Evanston, Ill.	F. H. Palmer; Palmer Publishing Co.			
Education, Boston, Mass.	C. H. Johnston and associates; Warwick and York.			Contains "helps for pupils and teachers."
Educational Administration and Supervision, Baltimore, Md.	Nicholas M. Butler; Educational Review.			
Educational Review, New York, N. Y.	Faculty of School of Education and Faculty of School; University of Chicago Press.			
Elementary School Journal, Chicago, Ill.	Chicago Press.	1.00	3.00	
English Journal, Chicago, Ill.	Chicago Press.	10	1.00	1.50
General Science, Salem, Mass.	Chicago Press.	12	1.00	1.00
History Teachers' Magazine, Philadelphia, Pa.	Whitman.....	12	1.00	1.00
Industrial Arts Magazine, Milwaukee, Wis.	Robert E. McKinley and Henry Johnson, for American Historical Association.			4
Journal of Education, Boston, Mass.	Wm. C. Bruce and associates; Bruce Publishing Co.			10
Journal of Educational Psychology, Baltimore, Md.	A. E. Winship; New England Publishing Co.			12
Journal of Geography, Madison, Wis.	J. Carleton Bell and associates; Warwick and York.			50
Journal of Home Economics, Baltimore, Md.	Ray H. Whitbeck; Journal of Geography.			10
Kindergarten and First Grade, Springfield, Mass.	Alice P. Norton; American Home Economics Association.			10
Kindergarten-Primary Magazine, Manistee, Mich.	May Murray; Milton Bradley Co.			12
Manual Arts Bulletin, Emporia, Kans.	J. H. Shults; Kindergarten Magazine Co.			10
Manual Training and Vocational Education, Peoria, Ill.	Geo. K. Wells; Kansas Manual Arts Association.			10
Mathematics Teacher, Lancaster, Pa.	Charles A. Bennett and William T. Bawden; Manual Arts Press.			10
Mind and Body, Minneapolis, Minn.	W. H. Metzler, for Association of Teachers of Mathematics.			4
	W. A. Stecher; Turner Publishing Co.			10

(B) EDUCATIONAL PERIODICALS DEVOTED TO SPECIAL FIELDS—
Continued.

Periodical and place of publication.	Editor and publisher.	Issues per year.	Price per year.	Auspices.
Modern Language Journal, New York, N. Y.	E. W. Bagster-Collins; Federation of Modern Language Teachers.	8	1.50	"Federation of Modern Language Teachers' Associations and by the Associations of Modern Language Teachers of the Central West and South."
Modern Language Notes, Baltimore, Md.	James W. Bright; Johns Hopkins Press.	8	2.00	
Monatshefte für deutsche Sprache und Pädagogik, Milwaukee, Wis.	Max Griesbach et al	10	1.50	"Organ of the National German American Teachers' Association."
Music Supervisors' Journal, Madison, Wis.	P. W. Dykema; National Conference of Music Supervisors.	4	1.50	(Free to members) National Conference of Music Supervisors.
Nature Study Review, Ithaca, N. Y.	Anna B. Comstock; Comstock Publishing Co.	9	1.00	"Official organ of the American Nature Study Society." (Method.)
Normal Instructor-Primary Plans, Dansville, N. Y.	W. J. Beecher and associates; F. A. Owen Publishing Co.	10	1.25	
Pedagogical Seminary, Worcester, Mass.	G. S. Hall; Florence Chandler.	4	5.00	
Playground, Cooperstown, N. Y.	Playground and Recreation Association of America.	12	2.00	Playground and Recreation Association of America. (Method.)
Popular Educator, Boston, Mass.	Popular Educator Co.....	10	2.00	
Primary Education, Boston, Mass.	Margaret A. Whiting, Primary Education Publishing Co.	10	2.00	Do.
Psychological Clinic, Philadelphia, Pa.	Lightner Witmer; Psychological Clinic Press.	9	1.50	
Quarterly Journal of Public Speaking, Menasha, Wis.	J. M. O'Neill; Geo. Banta Publishing Co.	4	2.00	"Official organ of the National Association of Academic Teachers of Public Speaking."
Religious Education, Chicago, Ill.	Henry F. Cope, secretary; Religious Education Association.	6	3.00	"The Journal of the Religious Education Association."
Science and Society, Lancaster, Pa.	J. McKeen Cattell; Science Press.	52	3.00	
School Arts Magazine, Boston, Mass.	Henry Turner Bailey; School Arts Publishing Co.	10	2.00	
School Music, Keokuk, Iowa.	P. C. Hayden.....	5	.50	
School Review, Chicago, Ill.	C. H. Judd and associates; Chicago University Press.	10	1.50	"Faculty of the School of Education of Chicago University." (Secondary Education.)
School Science and Mathematics, Mount Morris, Ill.	Chas. H. Smith; Smith & Turton.	9	2.00	Official organ of many State and local science and mathematics associations.
Storyteller's Magazine, New York, N. Y.	H. D. Newson, Storyteller's Publishing Co.	11	1.50	
Teachers' Monographs, New York, N. Y.	S. M. Furst and associates; Teachers' Monographs Co.	8	1.00	
Training School Bulletin, Vineland, N. J.	E. R. Johnstone and associates; Training School.	10	1.00	
Ungraded, New York, N. Y.	Elizabeth E. Farrell (president), for Ungraded Teachers' Association.	9	1.50	"Ungraded Teachers' Association of New York City."



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SCHOOLS OF SCANDINAVIA, FINLAND AND HOLLAND

By

PETER H. PEARSON

DIVISION OF FOREIGN EDUCATIONAL SYSTEMS
BUREAU OF EDUCATION

[Advance Sheets from the Biennial Survey of Education, 1916-1918]



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SCHOOLS OF SCANDINAVIA, FINLAND, AND HOLLAND.

By **PETER H. PEARSON,**

Division of Foreign Educational Systems, Bureau of Education.

CONTENTS.—The war in its effects on the schools of Scandinavia—Norway: General characteristics of the school system; School gardens; School welfare activities; Speech forms in the schools; Teachers' pensions; War conditions and the schools; Present trend in educational thought and school legislation—Sweden: General view of the educational system; Care of the pupils' health; Religious instruction in the elementary schools; Studies of the home locality; Development of the communal middle school; Obligatory continuation school; Educational activities apart from the schools—Denmark: General survey of the educational system; National Polytechnic Institute; the people's high school; school excursions; Teachers' training, salaries, and status; Articulation between primary and secondary schools—Holland—The schools of Finland—Education in Iceland, by Holmfridur Armadottir.

THE WAR IN ITS EFFECTS ON THE SCHOOLS OF SCANDINAVIA.

Though the Scandinavian countries have been spared the ravages of war, there has not been a day during the struggle when the danger of being drawn into it was not imminent. Similarity of geographical location with their full independence similarly endangered has brought about a degree of unity among these countries which would not have been effected readily under other circumstances. Scandinavian working men, leaders of industry, exhibitors, and educators have come together. To them the new outlook created by the events of the autumn of 1918 will bring enlarged opportunities. The accumulated energy of these peoples will be set free to issue in achievements in undisturbed accord with their racial characteristics. The sense of union and enlargement, as one of the results, is particularly significant for the schools. As the world events are reaching a consummation in a just and, it is to be hoped, enduring peace, the educators and other leaders of the North are anticipating the part their own countries will be called upon to take both in respect to their individual growth and in rising to a new plane of international ideals.

Their close proximity to the belligerent countries and their active trade relations with these brought on events that upset the economic conditions in Scandinavia, with consequent hardships to the people. Although traffic to foreign ports was made precarious, the tempting prices offered by foreign buyers caused an export of commodities on an unprecedented scale. Before restrictive commercial regulations could be put into effect there was an alarming depletion of food resources. The inevitable result was the immediate rise in the prices of foodstuffs and household necessities.

To help ward off the threatened hardships, teachers and pupils at once offered their personal labor in various productive capacities. Though the measures taken in different countries were generally similar, they assumed in Norway an organized and practical directness worthy of note. In many cities of this country the pupils were organized into classified working groups. Under the leadership of their teachers they held themselves in readiness to respond to calls

for help on the farms. Again, the school gardens and every other available plat of ground were handed over to their management and tilled under the direction of experts, who applied the most efficient methods of intensive farming.

Careful accounts were kept of the expense for seed, the labor, and the yield. Usually each pupil's share of the proceeds was the crop his labor had produced. In order to help in this way, some redistribution of the vacation period was found necessary, which seems to have been made without serious encroachment on the time for the school work.

In a similar way the system of school kitchens was fully utilized for the productive labor of the girl pupils, who were directed in the most efficient management of household economics.

Besides specific lines of work in the immediate charge of the teachers, the pupils' labor was made generally available to employers in the cities. In former years child labor was permitted to an extent that to us would seem to endanger the welfare of the pupils. But it now appears that the authorities are permitting it only under strict registration of the pupils' age, hours, health, and conditions of the work. In Gothenborg, Sweden, there is an effort made to have the teachers of the city cooperate with the employment bureau in placing the labor of pupils. One man teacher and one woman teacher, selected for their interest in the pupils, assist the regular city officials.

Again, with the present needs before them, it was observed that some of the subjects of the curricula were more helpful in the present crisis than others. One effect of the distinctions thus noted was the effort to find more room for the practical kinds of subjects; another was to try to lay greater emphasis on the utilitarian character of others. Teach hygiene, it was urged, not as an academic subject, but as one that promotes health and sanitary living. If the textbook in use does not lead to these ends, choose a book that does.

In connection with these departures from educational traditions a valuable pedagogical principle has been emphasized. Educators are seeking instruction material outside of books and classrooms to an extent that was not practiced before; and they find more of it in direct life and living than was ever before considered in connection with school purposes. In Sweden and Denmark emphasis is laid on making, handling, observing, and producing things; school trips preceded by mapping the route and followed by putting the notes of the trip into organized form; researches and studies in the home locality and its resources and industrial possibilities.

Measures are taken to make permanent use of the experiences that have come with the new departures. New activities found to have value will be adjusted to the school régime where possible—new in-

struction material, new uses of the old, direct efforts of pupils in industrial and productive lines. The school men see also a coming industrial competition for which it is their duty to prepare the future business man, scientist, and technical worker. The Polytechnic Institute of Copenhagen is increasing its already excellent facilities and adding to its large number of practical courses in order the more successfully to prepare for the competition.

There is a new conception of the teacher's usefulness, which is not likely to be lost sight of after the present economic stringency. The teacher's duty no longer ends when he has taught his pupils something. It rests with him in a large measure to see to it that the teaching results in a sound and hearty form of living, the fundamental prerequisite of which is a strong and robust physique. In order to be of the greatest use here he must enlist the cooperation of the parents. This conception has been embodied in the regulations of December 31, 1917, applying to the secondary schools of Denmark.

These regulations provide that parents' meetings are to be held once a year. Those eligible to participate in the proceedings and to vote on matters that come up for adoption are all who have children at the schools or who are the guardians of children attending. The teachers of the schools have the privilege of attending and taking part in the discussion. To prepare topics for discussion a committee is appointed consisting of the superintendent as chairman, two teachers selected by the school board and four members from among the parents and guardians. The topics are to consist of the health-promoting conditions of the school (buildings, scheduled hours, study periods, home work, etc.) and other matters such as delinquency of pupils, conduct, promotions, appointment of teachers. A report is to be submitted to the Minister of Education covering the meetings in the district during the year.

A strong democratic feeling has long existed in the hearts of the Scandinavian people, a feeling now struggling to express itself in intellectual forms and institutions. Under the pressure of local political, economic, and geographic conditions it emerges in visible forms with marked differences in each country.

In Denmark this feeling has resulted in the creation of a type of schools that appeals for patronage to the farmers and middle classes, with the purpose of educating and returning them to their own class with such efficiency and prestige as education alone can confer.

Certain changes in the school statutes of Sweden, made in accordance with educational movements in that country, point to a trend toward greater local control of the schools. In 1913 measures were taken for the creation of a People's School Council, to be an advisory body, to criticize the general work of the schools, and to take the initiative toward improvements. In this capacity it will assume

some of the most important duties formerly exercised by the State Supervisory Board. In other respects, too, a degree of school control formerly vested in boards and committees of the clergy has been handed over to similar bodies of laymen. In a number of leading cities, details of the local educational institutions, formerly managed by the parish vestry meetings, have been put into the hands of the city councils. In the Report on the Schools of Sweden, issued by the Ecclesiastical Department for 1914-15,¹ is given a series of propositions which, according to the suggestions of the board, should be dealt with by subordinate authorities and acted upon without the formality of Royal approval.

As the character of the public elementary schools is the most direct expression of the people's views and wishes, it has been long regarded as desirable that the work of the secondary schools should be a direct continuation of these. When the *real-skola* (modern school) in Sweden, therefore, attracts pupils at the end of the third year, it causes them to make a departure from the original trend. To obviate this the communal middle schools grew up to fit the people's own children for government positions without necessitating a change in their modes of life. These schools are, moreover, community institutions with schedules and working conditions less rigid than those of the State schools.

The people's voice, too, is strongly heard in its insistence on alteration in the form and method of the religious instruction in the elementary schools. Religious instruction should be brought before the children, not in confessional formulas, nor in maxims of conduct, but in life pictures taken from the Bible and from the history of the church. The earnest consideration given these demands by churchmen and educators will eventually lead to changes in the method of instruction in Christianity.

That the Government of Norway has responded to the desires of Norway's people is in part evidenced by the liberal appropriations made to the farmers and farming. A special session of the Storting was called to encourage a greater agricultural output for 1919. An allowance of 3,000,000 crowns was made for general agricultural purposes and 5,000,000 crowns for the cultivation of new land. The Association of Norway's Young Men and Women has urged the erection of gymnasias for the country youth. Arrangements are also under way to establish an advanced secondary school without the middle school, evidently to effect as close a relation as possible between the preparatory work of the folk school and the secondary institutions.

Closely associated with the trend toward democracy is that toward internationalism, which in recent years has brought teachers and others of these countries together for cooperation. At its meeting in Stock-

¹ The latest at hand.

holm in 1910, the Teachers' Association of the North, an all-Scandinavian organization, celebrated its thirtieth anniversary. The work of this body, though not primarily directed towards international ends, has really moved in this direction in dealing with the problems which the members as teachers have in common. The annual meetings at one or other of three capitals brought teachers together as guests and hosts, creating opportunities for an understanding of each other's views. The questions that came up for consideration at the regular sessions gave rise to a number of school activities in which all were called upon to participate. It paved the way for an interchange of pupils' visits among these countries, leading to a better acquaintance among the pupils, and, as a consequence, among their parents. From 1907 on, such school visits have frequently been exchanged between Danish and Swedish pupils. In 1908¹ about 75 pupils at one time visited Denmark, being entertained by Danish families and in return entertaining their hosts by music and songs from their own country. By contribution the members of the Teachers' Association raised money for the erection of a statue of a prominent educator, unveiled during the session of 1916 in connection with a special program. The girl pupils are publishing a Scandinavian students' magazine, "*Bog og Naal*," (Book and Needle), edited by a staff on which the three nations are represented.

These occasions of mutuality have deepened the sense of regard that the schools of one country have for the work and ideals of the other. Quite spontaneously, the work has been so ordered in the respective schools as to minimize any feeling of antagonism that might exist in the pupils on account of the *hate* which their ancestors fought with each other. While the schools of the three countries were the first to get together, there have always been other similar movements such as the Workingmen's Association, which in the same way have conferred on their common interests. Although a distinct form of pressure was the moving cause in the recent meeting of the three governments in the persons of their kings, the preceding sessions of the people made this meeting more easily possible. At any rate this group of limited monarchies, essentially democratic, has discovered the road to the larger internationalism to which the world events of November, 1918, invite. A signal instance of their preparedness for these ideals was recently afforded in Norway, when the Peace Association of the country, in 1918, petitioned the Storting to establish at the University of Christiania a professorship in the science of international peace.

¹The only detailed account at hand of these visits, which since that date have become more general.

NORWAY.

GENERAL CHARACTERISTICS OF THE SCHOOL SYSTEM.

Obligatory attendance is formally fixed at 7 to 14 years of age, but the enforcement is such that the period of attendance depends upon the pupil's actual advancement rather than upon his age. The work of both teacher and school management is guided by an official handbook, which specifies the subjects, courses, hours, entrance conditions, holidays, vacations, and the weeks of the school year, which may be as high as 40, depending on local requirements.

The schools are maintained by taxes levied on the State, county, and municipality. Each county receives State aid in paying the rural teachers, to the amount of forty-four one-hundredths of the salary. In a county where it is found difficult to meet the expenses falling to its share, 15 per cent in addition to the above amount may be paid to it from the State funds. The expense of heating, lighting, and keeping the school property in order falls on the municipality. In the cities the State pays one-third of the teachers' salaries and two-thirds of certain service increments, all State contributions being limited by a fixed maximum.

The elementary schools.—Though the elementary school comprises seven years, pupils who expect to pursue studies beyond this course may enter the middle school from the fifth class. An effort was made some years ago to require the entire seven years as preparation for the middle school; it was hoped thereby to give education a more democratic character and to eliminate the feeling of social divergence and rank in the schools. Apart from these aspects of the proposed plan, educators did not find it practicable, for it would push the elementary school beyond its legitimate scope and endanger its work. Again it would postpone by two years the time when the pupil would naturally pass over to a continuation school.

The appended table based upon the official plan shows what subjects are studied in the seven years of the elementary schools and the time apportioned to each:

Subjects.	Years.							Total.
	I.	II	III	IV	V	VI	VII	
Religion.....	7	7	5	6	6	6	6	43
Norwegian.....	10	8	8	8	8	6	6	54
Mathematics.....	6	5	4	6	4	6	6	37
Geography.....			2	2	3	3	3	13
History.....			2	2	3	3	3	13
Nature study.....	2	3	1	2	2	2	2	14
Writing.....	5	5	4	4	2	2	2	24
Drawing.....			1	2	2	2	2	9
Vocal music.....		2	1	2	2	2	2	11
Manual training.....			2	2	4	6	6	20
Gymnastics.....				2	2	2	2	8
Total.....	30	30	30	38	38	40	40	246

The middle schools.—The course of the middle school covers the next four years. Pupils are admitted upon examination. Here more time is given to Norwegian, including special study of the vernacular prevailing in the province in which the school is located. The instruction in religion includes reading of the Bible and study of the main events in church history.

Two foreign languages are taken up, English and German, three hours per week in the former and four in the latter. According to the present trend of opinion more time is to be given to English, which will receive five hours from the second class on. The aim of the foreign-language study is to be able to make extempore translations of easy foreign texts; but the pupils are also expected to be able to use the language in the course of ordinary easy conversation.

In nature study the aims are to attain knowledge of those animals and plants that are most closely connected with later practical callings. Hygiene and the principles of sanitation are here brought before the pupils, the study of the human body and the functioning of its organs, the effects of strong drink, and, in general, the laws seen in such natural phenomena as may readily be brought to the child's attention.

In mathematics practical considerations take precedence over theoretical ones. The child is led to deal with problems that enter into the every-day transactions in business, simple bookkeeping, and applied geometry. Courses in history lay special stress on modern times and events, and, in particular, on the history of Norway and its civil organization.

Geography takes up the natural features, topography, soil, climate, and industries of Norway. The work in writing now shows great improvement in class-room methods. The teacher leads the pupil to see and to know, then to arrange the material, and finally to put it in his own individual literary form.

Drawing takes an altogether practical direction, and aims to prepare the pupil not only for the later trade schools but for the advanced technical schools in which Norway occupies a foremost place. In sloyd and manual training the number of hours per week has recently been considerably increased.

The gymnasium.—The gymnasium follows with a three-year course. It divides into three branches: (1) The modern branch; (2) the history and language branch; and (3) the history-language branch with Latin. Accordingly, the pupil, when this stage is reached, has before him electives by groups. As the pupils who elect the Latin branch become acquainted with this subject rather late, the aim of instruction is acquaintance with about 150 pages of Caesar, Cicero, and Livy, and the ability to read an easy text extempore. The requirements in the mother tongue are familiarity

with a comprehensive selection from Norway's authors, a survey of the language in its origin and historical relations. In translations, Greek and Roman authors, Homer and Plato, Shakespeare, Milton, and Goethe are taken up. The further studies in German, English, and French are calculated to impart a knowledge of the development of these peoples respectively. In history and geography the aims are identical in kind but naturally higher than at the earlier stages; physics, physiology, and sanitation are dealt with more comprehensively than in earlier nature studies; mathematics admits of the theoretical phases; drawing takes up advanced problems in technique.

Other institutions.—Norway's school system is, in its articulation of courses and schools, admirably adapted to give consistency and completeness to each pupil's education, no matter at what stage choice or necessity compels him to discontinue. Ample provision is made for advanced study. Public and private schools for girls are found in many towns and cities, and these aim to impart an education, different in some particulars from that of boys, but equivalent in advancement. There are 22 schools for navigation, 19 for agriculture, 16 for gardening, 6 for dairy farming, 1 agricultural high school, and 6 schools for engineering. In 1917, 45 schools gave instruction in metal and textile work and in the common trades of the country. The report for the same year lists 11 schools in domestic science. The Institute of Technology at Trondhjem takes rank among the foremost of its kind in any country; so also the Royal Art Institute at Christiania and the School of Mechanic Art at Bergen. Ten normal training schools prepare teachers for the work in the elementary classes. The Department of Education at the university trains teachers for positions in the secondary schools. The Royal Frederick University at Christiania makes constant research in the sciences, enriching these by contributions from its specialists.

Affiliated with the university are clinical facilities, collections of great value, and a library of 350,000 volumes. There is a botanical garden, an astronomical observatory, and a meteorological institute. Learned societies, long established and with historic prestige, are connected with the university as a central headquarters.

In Norway the continuation schools' stand on the border line between class room and shop. Recitations are held during hours in which the pupils are free from their daily duties, usually 6 to 8 or 7 to 9 in the evening. On account of the full measure of work the pupils have in their employment, it is necessary to limit, so far as possible, the school tasks to the recitation hours. Most pupils are employed in trade, office, shop, factory, or household. At present

¹ As these schools continue the subjects with a view of practical application in courses given mainly of evenings, some other term than "continuation" would probably be better.

they are receiving higher wages than formerly with constant inducements to do extra work in the evening—conditions that make the school work very difficult. The report from the continuation schools at Christiania shows a large attendance in the commercial courses, and a fair attendance in the courses instructing in the trades. Courses especially for girls impart instruction in dress-making, housekeeping, the care of children, and hygiene. On account of the large number of applicants it has been found necessary to divide the district into three divisions with one school in each.¹

At Stavanger the same kind of institution gives commercial courses during the winter where those who have left the elementary school can get special training. English is taught here, as it is elsewhere, in the commercial cities of Norway; Norwegian is a chief subject; bookkeeping is accorded a prominent place. At Stavanger another evening school, partially supported by private means, gives free instruction to boys in shoemaking, blacksmith work, and carpentry. Other courses give girls instruction in sewing and cooking. A special technical school supported by the State and city together, gives day and night courses in drafting and mechanics, which teach young men how to handle electrical apparatus and do engineering work necessary in ships and factories.²

SCHOOL GARDENS.

When gardens for productive purposes first came to exist in connection with schools they were left to be cultivated by children whose parents were poor. Since the outbreak of the war they have attained a much greater significance. Experts are instructing the teachers, who in turn direct the pupils how to make the most of the ground allotted to them. Among the children's gardens is the teacher's own, supposed to be a model for the others, and expected to show how much a little plat of ground can produce.

The people of Norway have a procedure called "inter-cultivation" by means of which several crops are raised simultaneously on the same lot. Between the potato rows they plant a species of beans which thrives without interfering with the potatoes. Among the strawberries they plant certain kinds of kale. Under the fruit trees and in other shaded places certain other kinds of the cabbage variety will grow. To get an early crop of potatoes they are told to start them in boxes where they may form long shoots by the time the season permits of planting them in the open ground. Seeds and plants are furnished the children free of charge; for their labor and care they get the crops they raise. It has been found that the interest displayed by the children reacts upon the parents so that these come to see the significance of the school gardens.

¹ Beretning om Kristiania's Fortsaettelsesskole.

² From material submitted by Consul Dunlap.

Norway's School Garden Association issued the following appeal in the interest of the work to begin in the spring of 1918: ¹

No hands that can do anything must be idle during the coming spring and summer. We have in mind many who for the approaching vacation have not as yet found opportunities for service in the direct production of foodstuffs. For that reason we are now appealing to teachers everywhere in country and city, to teachers of athletic clubs, to young peoples' associations, temperance organizations, welfare associations, and all kinds and groups of persons with or without political connections. Place yourselves at the head, each in his own circle, and try to effect a cooperation of willing and active forces, of both men and women, to the end that we may all get started to work for an increase of the foodstuffs our people shall need to maintain themselves the coming winter. Obviously it is of particular importance to use the spring months in the best way, but it is of no less importance to use the winter months to organize the work. We urge teachers to secure the support of the school authority and the agricultural committee with the view of starting at once to prepare the classes to take hold of the work of planting potatoes, cabbage, kale, beets, carrots, and other kinds of vegetables to be used in the kitchen. The chairman or leader of a society should organize the members into suitable work groups, say of 6 to 12 in each, and secure the ground, the seeds, and the necessary tools, so that everything is ready when spring comes. It should be possible to procure the money from patrons in the villages, from the banks, and from rich people who may be interested. A part may be raised through extra school exhibitions and entertainments during the course of the winter.

SCHOOL WELFARE ACTIVITIES.

The system of appointments and eventual pensions provides inducements for teachers to become permanent members of the community, thereby making it possible for their advice and help to extend outside the school and beyond the courses. Large and carefully selected libraries for children have been organized mainly by the teachers. Despite their limitations remote rural districts have accomplished much in this line. Within their resources they are following the example set by the cities. Every school attempts to have at least the beginning of a library. In Christiania at the Central Library are attractive reading rooms for children, and over 340,000 volumes selected to serve their needs. For the year 1915-16, 37,974 volumes were loaned.

To teach the children thoughtful and purposeful thrift almost all the schools of Christiania have conducted banking activities to take care of the pupils' deposits. During 1915-16 there was a falling off in the number of depositors as well as in the sum total of deposits, but the following year showed a recovery in the totals, so that the year's accounts amounted to 144,000 crowns. Much of this is drawn when the pupils finish their courses or leave the city. It is often used for clothes to wear at commencement and graduation exercises. In these connections the teachers never fail earnestly to impress their pupils with the importance of continuing to save. The work is supported and handled by the Savings Bank of Christiania.

¹ Skolebladet, Mar. 9, 1918.

The health supervision has been hampered by the limited number of physicians who could be assigned to the work, and also by insufficient means to provide an adequate number of nurses and caretakers to follow up and apply the physicians' directions. Though the report indicates that the work has been slow, it points to exceptional thoroughness. It is the aim of the authorities cooperating with the medical inspectors that no child in Norway shall suffer in health or development on account of defects or diseases than can be remedied. There appears to be gratifying promptness in the application of the remedial measures prescribed in each case—whether for eyes, teeth, nose, adenoids, or tonsils. School physicians are directed to proceed at once to treat curvature of the spine, usually by massage when appropriate, and aenemic conditions by ordering better nourishment, fresh air, and rest. Where the parents are unable to provide the means, the municipality takes care of the case. A record is kept of each child's physical condition, with a fullness that to a layman would seem unnecessary.

In the schools of Christiania are ample facilities for pupils' baths, and each child is instructed to take at suitable intervals a shower or plunge bath of a temperature carefully regulated. The school records show to what extent each pupil has availed himself of these facilities. Instruction in swimming is a regular part of the school work, and the reports for 1915-16 showed that 636 boys and 480 girls learned to swim during the year. Formal athletic exercises with the use of simple apparatus are encouraged and regularly conducted. The pupils of this country need no special inducements to take part in whatever develops bodily strength and prowess, and, as would be expected, they are especially enthusiastic in their national sports of skating and skiing.

Lunch rooms have long been connected with the schools in some form or other. Formerly the janitor had a supply of buns, rolls, coffee, milk, etc., which were furnished the children at a small cost. Now many cities supply the primary children with one meal a day during the winter months. To poorer children this is free; to others it is sold at small cost. A central cooking department in Christiania supplies the elementary school children with daily portions of the best food served hot under the direction of a matron. A committee of teachers decides what children shall be served, upon application by the parents.

In the city of Stavanger municipal welfare measures for school children have assumed still more comprehensive scope. The district comprises about 150,000 people, of whom about one-third live in the city. The children are supplied not only with free books and writing material, free medical and dental care, medicine, and, when needed, free shoes and stockings, but also free midday meals. Three times a

week a regular dinner is served. The meals are served in three different localities, a steam bakery supplying the food. It is hoped that the food may eventually be prepared in a community kitchen, as in Copenhagen. Many mothers with young children work in the factories. These women often do not have sufficient time to see that their children are properly fed, and a diet of bread, butter, and coffee is likely to be the rule; hence the importance of the wholesome and nutritious meal the school furnishes. A committee decides each case before the children are admitted to the school tables.

SPEECH FORMS IN THE SCHOOLS.

The necessity of sanctioning the use of two language forms—the book language and the vernacular—has handicapped and often embarrassed the teachers of Norway. One of these speech forms is always tending to supplant the other, with the consequent danger of provoking controversy, as teachers and school boards take sides in behalf of one or the other. At school meetings and in the educational journals they have become perplexing problems.

In recent years the vernacular has made headway and gained adherents to such an extent that in the west, according to a member of the Storting, Mr. Fretheim, two-thirds of the districts have elected it as the preferred speech form; in the south about one-third, and in the north about one-tenth. As schoolbooks are printed in both forms, and as pupils sometimes show greater readiness in the one and sometimes in the other, and, again, as the vernacular has not yet attained complete fixedness in orthography and grammar, the teachers and boards are constantly confronted with the necessity of making difficult selections and adjustments. In order to avoid clashes Government regulations were adopted with the view of permitting teachers and pupils to make the adjustment on an elective basis with a minimum requirement.

In their final examinations pupils, according to the law of 1907, were required to write one essay in the vernacular, and explain a selection from Old Norse literature from the vernacular and also from the book language. Two compositions are required to be written in either the book language or the provincial tongue. Candidates who present both of these in the same language are required to write an additional easy theme in the other language.

These regulations were amended by a law passed during the year 1918, and now read:

1. In the oral instruction the pupils are to use their own speech form and the teacher will, so far as possible, adapt his own natural speech form in accordance therewith.

2. The school board will decide for each district, class, or division (a) whether the written work of the pupils is to be done in the vernacular or in the book language; and (b) what kind of primer is to be used.

In regard to textbooks the pupils may use either those printed in the vernacular or those in the book language in accordance with the choice of parents or guardians.

In a district where parallel classes have been organized, parents who wish their children taught in the speech form which is not the predominant one at the school, may make a demand to this effect provided there are enough children to constitute an entire class, and, provided further, that it can be done without materially increasing the expenses of the school. Children for whom a speech form has thus been chosen may not without the consent of the board pass over into classes with a different speech form.

TEACHERS' PENSIONS IN NORWAY.

The pension enactment of the Storting of 1918 places the teachers on a par with government officials. It is provided that the retirement of a teacher may be requested by the school board by the time he is within 3 years of the pension age; if not, he may retain his position 5 years beyond this limit. When he comes within 10 years of the teaching limit of 70, he has the privilege of applying for retirement and pension provided the sum of his years of service and of his age is as much as 80 years. At the age of 60 with 30 years of service to his credit he receives full pension. At 60 with 20 years of service he may be permitted to retire, but he receives then only two-thirds of the full pension.

The total amount of the teachers' salary compensation forms the basis for computing the pension: Fixed salary, bonus, compensation for free home, light, fuel, and whatever else the regulations acknowledge as salary, such as pay as choir leader, secretary of the school board, etc. The pension is computed on the sum total of these salary units.

Full old-age pension presupposes at least 30 years of service, and comprises 66 per cent of the remuneration if it does not exceed 3,000 crowns. If the salary in the aggregate is larger, the pension is decreased by 0.004 crown for every additional crown up to 7,000. Upon voluntary withdrawal with less than 30 years of service the pension is diminished by one-thirtieth for each year; yet it must make an aggregate of at least 30 per cent of the full pension.

A teacher receives a disability pension when his physical or mental powers are impaired to such an extent that he must leave his position. In such cases the years of service are disregarded and the pension

made equal to that for retirement at the age limit. In other cases of invalidity the pension is diminished in the ratio of the old-age pension, yet not so as to be less than three-fourths of this. Partial inability to earn salary is the cause for a corresponding decrease in the pension. A widow's pension is 30 per cent of the salary or the pension of the deceased teacher, yet never less than 200 crowns and not more than 1,500. It is not paid in cases where a teacher marries after his sixtieth year or after his retirement. It ceases upon remarriage. Orphans under 18 receive each 25 per cent of the widow's pension, yet the total amount received by the children must not be more than 100 per cent of this. If both parents are dead, the pension of the children is doubled."¹

WAR CONDITIONS AND THE SCHOOLS.

During the entire war Norway's industries and commerce suffered more than those of any other neutral country. She sustained enormous losses by the destruction of a great part of her merchant fleet. Traffic from the first was insecure and, as a consequence, marine insurance was high. Raw material was difficult to procure and the finished products of shops and factories difficult to bring to the consumer.

While the war did not result in commandeering school buildings and the labor of teacher and pupil as in the belligerent countries, it virtually did this in an indirect way. The high cost of everything necessary to sustain life compelled all available forms of labor to become productive.

The pupils of many schools were requested to organize themselves into groups and, together with their teachers, to be ready to respond to calls for help on the farms. The shops and factories frequently experienced a shortage of labor and tried to recruit it from the same sources.

For these reasons pupils individually and in groups were virtually compelled to leave their class work to take up something more urgent. More or less confusion in the year's work was one of the immediate effects of this. Another was to emphasize a distinction, as never before, between book learning and training leading to productiveness.

The time was opportune for an inquiry into the aims and intentions of almost every subject in the course. What was its purpose? Where did it lead to? And what would it help to produce? As a consequence there arose a tendency to give preference to subjects that in these respects measured up to the demands of the times. There appeared also an inclination to stress the more practical phases of subjects already established in the courses. Educators began to

¹ Schweizerische Lehrerzeitung.

point out that geometry, for instance, dealing with lines and angles, squares and cubes, could be brought into closer coordination with the art of making things—carpentry, cabinet making, building—where the lines and curves were embodied. Zoology might deal with domestic animals, their ways, and values, as well as with zebras and lions.

The importance of daily work and labor, and the duty of bringing it into the class room and teaching it as a recognized subject was discussed in the teachers' journals and meetings. It was one of the chief points adopted by the Pedagogical Folk Meeting in Christiania on August 25, 1918. But the teachers of Norway went further. They were not content with simply giving labor a place in the curriculum; they demanded conditions that should obliterate social distinctions between work with the hand and work mainly with the intellect—they insisted on the prestige of labor. With this in view the educators of Norway have formally asked that labor should be brought into schools hitherto considered exclusive, and there given a place of distinction.

On the purely economic side the war affected teachers severely. During normal times a teacher in Norway has a fair salary. The pension of which he is eventually assured permits him to look forward to the future without anxiety and hence to do his work with a full collection of his powers. Yet his remuneration is so carefully adjusted to his actual expense that a sudden increase in the cost of living creates distress.

Hence the war brought hard times to the teacher as well as to others. His salary was not commensurate with the added outlay. The authorities were willing to provide relief, but to adjust salaries by enactments of the Storting proved to be slow. Through their journals and such other means of publicity as they could command, the teachers brought their economic difficulties before the people. At its meeting in Trondhjem the Teachers' Association virtually resolved itself into an organization to campaign for relief. The parliamentary response came, first in the form of war bonuses and high expense bonuses, and, finally, with a plan for a direct general increase of salaries commensurate with the present times.

A communication from the president of the National Teachers' Association of Norway, Mr. A. Kirkhusmo, dated November 20, 1918, shows that while the bill providing an increase in salaries was pending before the Storting, the people throughout the country generally took independent action and very materially increased the salaries in their respective communities.

Economic pressure, too, caused a shortage of teachers that greatly handicapped the work of instruction in certain parts of Norway. Other lines of employment with more satisfactory pay attracted many teachers. A report came to the department of education at Christiania that in 1917 several hundred positions had remained vacant and that during the same year a still greater number of positions had to be filled by persons without professional training. In some parts of the country the weeks of the term of some schools were arranged so that the teacher could serve two schools.

The moral effect of the war on the pupils was forced upon the attention of the teachers. Familiarity with the accounts from the front, with details of bloodshed and violence, tends to disturb the psychic balance of a pupil in his impressionable years. Reports from the warring nations state that moral confusion sets in among school children to the extent of causing an alarming increase in juvenile offenses. The teachers of Norway are attempting to prevent the damage that threatens the children from exposure to notions of war and violence. They seek to lead the attention of the pupils away from these foreign interests to the interests and the affairs of their native land. In the scenes of Norway, in their fields and fjords, in their commerce and their industries, the teachers have found counter-attractions more favorable to the moral and psychic health of the pupils.

The war has emphasized another duty that falls on the teacher. The clergymen of the peace association of Norway have addressed themselves to the General Peace Association requesting the latter to formulate plans to enlist the teachers actively in the cause of peace. It had been assumed at the Peace Conference at Bern, in 1915, that the clergy could accomplish the most in the interest of peace. But later it became obvious that the field was too large, and that considerations of a purely psychological character added to the difficulty, owing to the popular misconception that the church and the school were two independent institutions. The public comments touching this question of the work for peace has brought the teachers' share in it into a clear light. No other class has an opportunity like the teacher for instilling and confirming humane and cultural sentiments of peace in the hearts of the young.

PRESENT TREND IN EDUCATIONAL THOUGHT AND SCHOOL LEGISLATION.

The present efforts to give the schools a more organic continuity from the primary years to the years of secondary advancement have their origin in the same general causes in all the countries of northern Europe. In reports prepared under the direction of the Ecclesiastical and Education Department of Norway, comprising a consensus of

opinions among the school men of that country, the movements there are traced and set forth in full. The several official publications issued under the auspices of that body, the latest bearing the date of March 2, 1917, indicate the issues that are uppermost. Supplementary accounts in the educational journals of Norway make it possible to follow the movements up to the end of 1918.

The committee entrusted with the preparation of the report maintains that not only educational, but, in a measure, social purposes come into play in adapting the schools of that country to the needs of the people. The unrest noted with the consequent demand for altered adaptations arises from the present democratic insistence that the purely social aim be eliminated and that the child's bent and endowments alone determine the stage where its divergence into a selected educational course may be permitted. With past school traditions in mind the committee maintains that in a community where a child's position in life is determined by its birth it is comparatively easy to plan a school well adapted to impart a fitting measure of information and training; a steadily ascending course of development leading directly toward the goal could then be planned, making it unnecessary for the learner to stray into by-paths or to be distracted by minor aims, but leading him to concentrate all his attention and bend all his energies toward reaching the goal clearly in sight from the beginning.

From the first the courses would, under these conditions, take different directions in accordance with various aims, soon creating a marked distance between the routes by their constant divergence. For this reason it would be difficult, if not impossible, to pass over from one route to the other, which might become desirable where one should discover during his progress that he had been mistaken in his destination or his endowments, and hence wished his aim changed.

In the latter part of the last century the movement toward unification began, when the preparatory classes of the middle schools were, to a great extent, taken over by the folk school. With the same general aim the law of 1896 provided a further lengthening of the folk school by two years.

After that date interest in reforms toward this end became more general, at least among teachers and patrons of schools. In consequence further changes were discussed in 1909 in connection with the debate on the budget for secondary schools. In this discussion it became clear that the articulation between the folk school and the middle school was unsatisfactory, and that it might be well to consider whether an adjustment in subjects and courses could not be effected requiring pupils to complete the seven classes instead of five of the folk school as entrance condition to the middle school.

The opposition contended that the present law did not place any obstacles in the way of such articulation, but that carrying it into general effect would necessitate extensive revisions of instruction plans and textbooks and that in the few places where it had been tried the result had not been satisfactory; even a three-year middle school had had great difficulties in bringing its pupils to a point of advancement where they could pass the examination. An alternative course of growth was suggested, by pointing out that the common school itself was capable of a development to the extent of preparing its own pupils for an examination virtually equal to that of the middle school. A nucleus of subject matter in the instruction could be provided and required of all; parallel with this could be elective subjects for those who had the middle school examination in view.

On November 7, 1911, a committee of seven persons was appointed to prepare a report on the question of how to effect a closer union between the folk school and the secondary school. As points of departure for their work the laws defining the aims of the two schools, respectively, were cited:

The folk school should help to give children a Christian bringing up and such general training as should be common to all members of society; the middle school continuing from the folk school should give the pupils a finished and advanced general training adapted to the receptivity of the children's years.

In May, 1915, the committee made a report in which the trend of opinion among Norway's schoolmen was clearly exhibited.

Among the difficulties set forth in the committee's published statement was that the contemplated reorganization would involve transition stages requiring special adjustment in courses and management. About 70 per cent of the municipal middle schools without gymnasium had only a total enrollment of from 40 to 150 pupils. If these schools lose their two lower classes, as some of the proposed plans would require; the attendance would be cut down to such an extent that they could not well be continued as independent schools. They would be merged with the folk school, and there would, in consequence, be one head for both institutions. This adjustment would have to be left to the administrative boards. Many middle schools are so large that even if they should lose the two lower classes they would continue to exist as independent institutions with respect to buildings, faculties, and management. As many of them are located in the larger cities, they would, when reorganized as an undivided institution, according to the plan under consideration, come to have a number of parallel classes. In those schools that offer full, or part, gymnasium work, it would be most natural to let the proposed two-year middle school merge with the gymnasium and be under the superintendence of its rector.

In adopting an order of this kind, various difficulties would be met, and not least in regard to the difference in the present training and duties of the teachers in the two classes of schools. The committee pointed out that the reorganization of the present middle schools into schools of two-year scope will have the immediate effect of making superfluous a number of teachers now holding positions without any provision for their employment in either the folk school or the reconstituted middle schools, even though these and parallel classes connected with them should increase in number.

At this stage of the progress the matter was again taken up by the Storting in 1916 and a sum of 3,000 crowns was appropriated to enable the committee, to continue its investigations. The plans of the committee, which were in the meantime fully discussed by schoolmen throughout the country, and eventually submitted to the Storting were in substance as follows:

1. An outline for the apportionment of hours and plan for instruction in a two-year middle school continued from a seven-year folk school. In order to show the articulation best adapted to effect the desired coalescence, the plan includes a time scheme covering years six and seven of the folk school and two years of the middle school. It also defined the aim to be attained in each subject in the concluding year of the folk school—the degree of advancement, in fact, that would have to be reached in religion, Norwegian history, science, etc. In a similar way the outline set forth the aim of the middle school. Specific remarks on the outline were then added touching on such details of subjects, hours, and adjustments as would be likely to come up in the reorganization. In the subsequent discussion of this outline, considerable opposition was met on the ground that it necessitated a serious disturbance of the plans followed by the folk school without any real and obvious gain.

2. The second proposition was a combination of a three-year middle school continued from the seventh class of the folk school. In the event this plan should be considered for adoption it was suggested that it might be well to follow the lead of a number of cities that had already put it into effect, and that a typical normal plan be adopted for these schools. Several suggestions regarding subjects were also made by the committee.

3. In view of the anticipated objections to plans 1 and 2 the committee drafted a third plan: A six-year folk school followed by advanced courses of instruction, one of which comprised a three-year middle school. There would then be two divisions of the six-year period, namely, an infant school of two years, and an elementary school of four. A schedule for these divisions covering subjects and hours was appended by the committee, though they did not find it

necessary to enter into all details of the instruction under this plan. The advantages gained by it would be: (a) The middle school examination would be reached after nine years; (b) the course of the middle school would comprise three years; (c) the folk school would at no point in its work be disturbed by adjustments necessary to the plan of the middle school.

4. In its further work the committee dealt with a plan for a practical continuation course in the middle school and found that there were no serious difficulties in the way of shaping a course of this kind, so that it would lead to the middle-school examination requiring equal advancement. The gain in this arrangement would be that the impression of a subordinate rank would be removed from the practical instruction which up to this time had been connected with the folk schools. There would, in every case, be the positive gain that such a course would lead to a goal which prevailing views associated with a certain respect and prestige.

The new arrangements thus outlined involved considerable departure from the present plan and organization of the schools, and in some cases, necessitated a regrettable disturbance of the present order. The Ecclesiastical and Education Department found that the views embodied in the report should be given thorough consideration, but as none of the propositions had a sufficiently general approval to be recommended for embodiment in the statutes to govern future school organizations, the department recommended to the budget committee of 1917 that 10,000 crowns be appropriated for the use of a new committee to push the work on this important and difficult problem to completion. Such further expenditure and delay did not meet with favor either among schoolmen or laymen.

Moreover, the general discussion aroused by the committee's report created a feeling among all ranks that the views of the people of the nation on these matters should be given official expression. During the spring and summer of 1918 this opinion gained support at a number of meetings held by various teachers' associations. The proposition received such general approval that a call was issued through the educational journals for a general teachers' and citizens' school meeting to be held at the University of Christiania in August, 1918.

In this way there came about what has been regarded as an epoch-making educational mass meeting; certainly this was one of the most notable school events in Scandinavia of 1918. Laymen and educators assembled at the University of Christiania on August 25, and outlined the demands that the Norwegian people should make on the schools. In formal resolutions categorically adopted they asserted that—

1. "Bringing-up and character forming are more important for the elementary and secondary schools than intellectual training."

Insistence was laid on fewer examinations, more personal responsibility of the teacher, more efficient supervision, and greater freedom for the initiative of the individual. In discussing the point last mentioned those present deprecated the pressure that influences or compels a teacher to move only in the direction pointed out by a political or educational majority, and that laws, regulating plans, and examinations circumscribe the work.

3. Training for actual work must be made more prominent in all schools as well as in the middle schools and the continuation schools. The teachers' professional preparation should have regard to this. In this connection it was urged that the new middle schools should not be made more popular, but that every-day work should be elevated and given its place and prestige in the middle schools now regarded as exclusive.

4. "The Government should, as soon as possible, appoint a committee to prepare a unified plan for continuation schools, work schools, and other classes of schools to enter into a legally fixed continuity for an educational training based on the elementary schools. This committee should include members from all classes of city and rural schools, from the primary to the university."

5. "It will improve the peoples' bringing-up if each kind of school has its own council and that all of Norway has a central council of control, a national board representing all kinds of schools from the primary to the university. But it should be provided that each class of institutions shall act with full independence under the regulations of its own board."

There would, accordingly, be established a board for secondary schools, one each for agricultural schools, technical, normal, and engineering schools; and each board should work with complete independence of the others. At the same time it was felt that they have so much in common as to require a central supervising board representing them all and consisting of the superintendents of the individual boards, the rectors of the high schools, and the rector of the university.

6. "The State should establish a teachers' high school, either independent or as a part of the university. Whatever is fundamental in daily work should here receive the place and rank that corresponds to the basic elements in the people's life." "And it was added that real, every-day work should have a place in recognized courses of manual work for men and women, household, natural history, etc., yet in such a way that the aim of moral stability and the forming of character should give direction to it all."

That the work done by the school committee should lead to such a referendum was perhaps not anticipated, but though the complications resulting make an early enactment by the Storting impossible, they will eventually lead to a fuller embodiment of the people's views in the school system.

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Skoletidende, Norsk Skoletidende.

SWEDEN.

GENERAL VIEW OF THE EDUCATIONAL SYSTEM.

Public education in Sweden is administered through the Ecclesiastical and Education Department and its various bureaus. A local school board, consisting of four members chosen by the parish assembly, has charge of details touching the schools of each parish. The pastor, who formerly was an ex officio member of the board, is no longer so, according to a recent ruling, but must be elected like the others in order to become a member. Another change in the local school administration has resulted in the transfer of the management in many cities from a separate board to the city council.

Changes are also contemplated in the organization of the diocesan boards, which exercise supervision over the local administration. These boards, it is generally conceded, are not as at present constituted adapted for the satisfactory superintendence of instruction.¹

But in regard to the change that would be expedient to make them more capable, opinions do not concur. In the propositions prepared by a special committee and dealt with by the Riksdag, the alternative appeared to be either to reconstitute the diocesan boards so as to guarantee that they would deal with school matters with greater regard to the interests of the folk school and the demands of educational science or else that their functions as educational boards should cease altogether. Thus far the Riksdag has taken no other action than to refer the consideration of this question back to the committee. With the same purpose of perfecting the administration of the schools successive enactments from 1904 to 1914 resulted in the creation of a general supervisory board for the control of secondary education and of a special board independent of the other to exercise supervision over the folk schools and normal schools.

¹ Folkskolekalender, Stockholm, 1916.

The character of the school inspection has also received much attention. The inspectors are appointed by the State; they visit the schools, confer with the school authorities; assist and advise these officials, examine petitions and appeals, and investigate and report on requests for State aid and for enlarging the activities of schools. How these important duties shall be attended to with the best results has also been the subject of investigation by a committee of the Riksdag. This body reached the conclusion that the work of the inspectors was that of specialists and that they should be appointed and directed by regulations with this character of their duties in view. Accordingly, the entire country was organized into new districts of inspection; a new code of instruction was provided, and new inspectors to the number of 34 were appointed.

Education in Sweden has been compulsory since 1842, the ages of required attendance being 7 to 14. If a child has not made satisfactory advance at the end of the fourteenth year, further attendance is required. These measures have had the effect of reducing illiteracy to a fraction of 1 per cent.

The common school period covers six years, divided into a primary course of two years and an elementary course proper of four. The pupil may then enter either a continuation school of two or three years or an intermediate secondary school, the latter continuing his schooling to the age of about 16.

As early as the third year of the elementary course the pupil's further studies may begin to assume a particular direction, if such has been determined. If advanced studies are contemplated, the pupil will enter the modern secondary school, which after six years opens to him either the modern gymnasium or the classical gymnasium, both concluding with a final examination (student-examen) preparatory for the university.

From the continuation school and the communal middle school the way leads to various trades and practical activities, business schools, household schools, agricultural schools, technical schools, and engineering.

The school year averages 35 weeks, 210 days, with a maximum of 35 hours per week. This normal duration of the year is varied to some extent by local conditions. If the degree of advancement attained at the completion of a certain stage be measured by the number of years from the pupil's entrance in the primary class, the following view of it will appear: (a) The elementary school completed after six years; (b) a continuation school, usually after eight years; (c) the real skola (modern school) after nine; (d) the communal middle school after 10; (e) the gymnasium after 12. (It is continued from the fifth class of the modern school.)

Schedules apportioning the time and specifying the subjects are drawn up for each school on the basis of a compendium furnished by the State. The school plans are not all uniform, for the intention is to leave such freedom to the local districts as may be required by conditions that prevail there. In the elementary school Bible stories and Luther's Smaller Catechism give the fundamentals in religious instruction. The Swedish language, history, arithmetic, geography, and natural history are taken up first. Swedish and religion are continued throughout; bookkeeping, psychology, civics, drawing, gymnastics, singing, domestic-science practice, and a foreign language (generally English) are added in the course of the last two or three years. Subjects pertaining to health, such as the hygiene of the teeth, are made obligatory. Training in swimming has of late received such attention that it is likely to be taken up as a regular subject.

Sweden has 77 advanced secondary schools, 39 with the six-year plan and 38 both real-skola and gymnasium, or the nine-year plan, and also 20 private institutions with gymnasium rank.

The fact that advanced schools for girls did not exist in any great number till toward the close of the nineteenth century is due to traditions that did not recognize education as necessary to a girl's advancement in life; now there are more than 80 institutions of this kind having a total enrollment of about 18,600 pupils. The courses include three years primary and eight years advanced instruction. The work in the upper classes has a gymnasium character, and leads to a final examination conferring a standing equal to that of the gymnasia for boys. In comparing the curricula of the upper classes with the corresponding ones in the gymnasia for boys we find, as would be expected, several new subjects, including domestic science and needlework. In the modern languages there is also a wider range of choice.

In the spring of 1918 there were 49 peoples' high schools in Sweden. Here they are similar in aims and methods to those of Denmark, where they had their origin, but unlike those of Denmark they have never been connected with any special folk movements in religion or civil life. They provide short practical courses for grown people whose schooling has been interrupted, say at 12 or 14 years, but who later wish further training. They receive their pupils mainly from the farms and they educate them back to the farms. They are founded by private or community endeavor; they receive state subsidy—in 1917 it amounted to 476,000 crowns—but they are, in the main, independent of state boards of control. The semesters are so divided that men receive instruction in the winter and women in the summer. There are no examinations, either entrance or final. The 30 or

more agricultural schools throughout the country are conducted in close connection with them.¹

Trade schools are found in all the principal cities. In Stockholm nine of these were established between 1912-1915. They comprise a machine workers' school, carpenters' school, blacksmiths' school, electric motor school, school for tinsmiths and coppersmiths, plumbers' school, milliners' school, dressmakers' school, school in household work, bakers' school, and a bricklayers' school. Each school is under state supervision having, however, its own board. With few exceptions they are "one-day" schools; that is, pupils attend one day a week and work as apprentices the remaining five. Their immediate object is to secure for the pupils suitable work in the shops and factories. The superintendent is in close cooperation with factories and their foremen, the latter often being instructors at the schools.

They give progressive courses of three years. The entrance conditions are to have attained 14 years, passed through 6 years elementary school, and, finally, to have secured employment in a shop of the kind in which the school gives instruction. Obligatory studies are reading, writing, social economy, bookkeeping such as applies to the trade, hygiene, and gymnastics. Though attendance is voluntary, studies may here be taken up to fulfill the requirements of the law of 1918, which makes attendance at a continuation school obligatory upon all pupils after having completed the elementary period.

Among institutions where advanced technical instruction is given are the following: The Technical School at Stockholm with five departments: 1. Technical Evening School; 2. Technical School for Women Pupils; 3. Higher Industrial Art School; 4. Building and Trade School; 5. Mechanical School, which has 80 teachers and about 2,000 pupils.

The Technical School at Eskilstuna has a department for the finer kinds of forging and metal working with instruction in freehand drawing with styles of art, modeling, carving, engraving, metal casting, chasing, metal hammering, etching, galvanizing, forging, filing, and turning. Other technical colleges are located at Malmö, Borås, Örebro, Norrköping, and Härnösand.

The Royal Technical High School at Stockholm gives advanced instruction in the mechanical arts and sciences. It is open only to those who have passed the final examination at the gymnasium. The course of study is four years and comprises: (1) Machine construction; (2) electrical engineering; (3) chemical technology; (4) mining science; (5) road construction and hydraulic engineering; (6) architecture; and (7) shipbuilding. There is also a department called the Material Testing Institute. The teaching staff comprises 24 professors, 2 lecturers, 24 special teachers, and a number of assistants.

¹Den svenska folkhögskolan. By Theodor Holmberg.

The past few years have been marked by a number of reforms and improvements in the facilities for preparing and training teachers. The salaries of the teaching staff at teachers' colleges have in general been liberally increased; so have also the allowances and stipends of students at these institutions. Nine training colleges for men, six for women, two private colleges for women—one at Gothenborg and one at Stockholm—prepare teachers for positions in secondary schools. They admit pupils between the ages of 18 and 26, the academic condition for entrance being the satisfactory completion of the elementary course.

The courses comprise four years, much of the time of the last two years being devoted to practice teaching. There are 34 other training schools for teachers of the primary grades. These give shorter courses, the total time of attendance amounting to from 8 to 16 months. There are three schools for teachers of defectives, 6 for sloyd, and 5 for domestic economy. Special institutions also train teachers in drawing, music, gymnastics, and games. In 1908 a professorship in education was established at the University of Upsala, and in 1911 a professorship in psychology and education was instituted at the University of Lund.

In order to provide for the continuous improvement of teachers, a number of courses, more or less permanently established, have come into existence. For this purpose there has been a lecture course in Stockholm since 1890. Academic vacation courses are given during successive years at Upsala, Stockholm, Lund, and Gothenborg. Special instruction in agriculture and horticulture is furnished through organized effort in Nääs and Jönköping. Various teachers' travel funds have been provided. A State grant makes an annual sum of 12,000 crowns available for this purpose. Lund, Malmö, Gothenborg, and Stockholm have municipal travel funds of from a few hundred crowns to several thousands annually.

CARE OF THE PUPILS' HEALTH.

The school authorities require an examination of the pupils' sight and hearing at stated times and have provisions for applying remedies and correctives for abnormal conditions. A statement from a physician is made out prescribing the treatment adapted to promote normal health and growth. If the parents are without sufficient means to have the child treated by oculist, dentist, or masseur, the cost is provided by the community. In most of the cities and larger towns the schools arrange for baths and swimming for both boys and girls at suitable places in the open, and in the winter plunge baths and shower baths are provided indoors. The use of the baths is voluntary in most cases; their importance is so fully brought

before pupils and parents that most children avail themselves of them regularly.

In the summer children who are sick or in delicate health are taken into the country on some farm where they remain for a time under the supervision of teachers and matrons. The place for these "vacation colonies," as they call them, is selected with the view of securing fresh air, sea breezes, and nourishing food for the children. There is usually a remarkable improvement in the health and vigor of the children when they return from these outings. In 1914 Stockholm managed 73 such colonies taking care of 2,439 children. Private persons have contributed liberally for this kind of welfare work, and in Stockholm the annual interest on half a million crowns is available for these purposes. Gothenborg, Malmö, Halmstad, Hålsingborg, and other cities send out thousands of children to farms and forest camps to recuperate in this way.

Again, upon the initiative of the National Teachers' Association many communities have instituted travel clubs for school children. These provide funds and plan trips to the large centers and other places affording enjoyment and instruction. The Tourist Association, under whose auspices the trips are often made, usually secure reduced railroad fare for the children.

As unsuitable and insufficient nourishment make it impossible for children to learn and develop at their best, many schools have taken this matter in hand by supplying free meals from the school kitchens, and, incidentally, furnishing the girls instruction in cooking. In some cases, too, they supply shoes and clothing to destitute pupils.

In connection with many schools are workrooms to provide occupation for children in the afternoon and thereby keep them from idling on the streets. Here they are taught to mend their own clothes and shoes and, in general, to occupy themselves with sloyd, weaving, crocheting, knitting, carpentry, metal fashioning, and basket work. Teachers are always present to direct the work. The expenses are provided by allowances from the municipality, donations, annual fees, private contributions, and the sale of the childrens' products. More than 75 such workrooms have been equipped in the villages and cities.

The General Teachers' Association, of Sweden, organized in 1860, has now a membership of about 12,000. Its subdivisions and committees, some of them with considerable funds at their disposal, pursue assigned activities in the interests of schools and teachers. The literature committee attends to the publication of matters of educational value. There are committees on syllabus and compendium for teachers, courses in drawing, school museum at Stockholm, traveling libraries, life insurance, and a Saga committee to publish

suitable literature for the young. There is also a bureau of information to assist teachers in economic and legal matters.

In 1906, a Women's Teachers' Association was organized. Its aim, as announced, is "to work for unity and cooperation among Sweden's women teachers and to further educational and economic interests." The association has its own school journals that work for these interests.

RELIGIOUS INSTRUCTION IN THE ELEMENTARY SCHOOLS.

One of the most vital problems before the schools of Sweden at present is the proposed alteration in form and method of the religious instruction in the elementary schools. The present attempts to prepare new books as the basis for this subject are made in response to successive notions in the Riksdag appearing as early as 1903 and taken up again in almost every session from 1908 until the present. In 1911 a committee was appointed to prepare a textbook as a guide for the religious and moral (*Sedeläran*) instruction. Difficulties, partly anticipated and partly unexpected, arose, so that the committee could not complete its work as early as intended. In 1916 two editions were submitted, one for the elementary schools and one for the confirmation classes. The discussion that followed seemed to make still further alterations advisable; and the work is again in the hands of the board.

The attempts thus made to alter the form of Luther's Smaller Catechism cut deep into the religious traditions of the Swedish people, to whom this book has been the means of imparting the rudiments of religious instruction for centuries. The criticism of the new version came from two opposite directions: (1) The conservatives in the State Church who find in it an unacceptable departure from the church traditions; and (2) the radical Socialists, who want neither the old catechism nor anything like it. Much earnest consideration has, however, been given to this problem by Sweden's prominent churchmen and educators with the result that the new demands emerge in a clear light. "Religious truths," they hold, "should be brought before the children, not in religious formulas nor in maxims of conduct, but in concrete life pictures taken from the Bible and from the history of the church. This mode of teaching does not exclude a general survey of the truths deduced and an ordering of these in synthetic statements."

STUDIES OF THE HOME LOCALITY.

In the United States landmarks of historic interest, identified with the westward advance of the early settlers, are found from Cape Cod to San Diego. There are the vestiges of the settlers' trails, the log cabin era, and the ruins of the temporary structures that were needed

for maintenance and defense in those early times. When some one of sufficient enterprise collects material of this kind and proclaims the fact in print or by lectures there is usually a gratifying local response and appreciation of the effort, often resulting in endeavors to record or otherwise preserve whatever may enhance the prestige of the place.

In Sweden this conception has taken the form of summer courses, mainly for teachers, given under the auspices of local organizations, and generally designated as studies in the home locality. In accordance with the underlying idea they set up as their aim, not primarily intellectual training of an academic character, but rather the purpose of rousing devotion to the home region, its interests and traditions. From the very first, then, the course included a study of early history and legends and whatever the place had to offer of antiquarian interest; later they came to include such features of the region as were significant for natural beauty and for this reason adapted to enhance its prestige; at a still later stage the resources and industrial possibilities of the locality were brought within the scope of the lectures.

Three distinct characteristics, due to the origin, have marked the work from the first: (1) The lectures are given during the summer, when nature is at her best; (2) they are held at central points in the locality to be studied; (3) they are conducted by teachers who have been brought up in the locality to be studied and who in consequence take a personal pride in their work.

Their origin dates back a year or two prior to 1907, when at least eight Provinces in Sweden carried out programs of this kind. The work extended rapidly the following years until in 1917 it came to have a prominent place in vacation studies in all parts of the country, particularly in the south, where love of home surroundings is especially strong.

A typical instance of how these home locality courses start and develop is contained in an account of a meeting held in the city park at Simrishamn, on June 18, 1909, published in *Vor Ungdom* (September, 1917). On this occasion 300 persons effected a permanent organization for the study of the home locality, each member enrolled paying a fee of 5 crowns. A six-weeks' session was held. Says *Vor Ungdom*:

The forenoons were as a rule given up to lectures and the afternoons to excursions. Historic events of local import as well as prehistoric associations were discussed, in connection with an exhibition of relics from the Bronze Age. There was a lecture about the neighboring church, one about the history of the city, and another about life in a near-by city, Ingelstad, during ancient times. One excursion was connected with talks on the local flora, another about the shale and lime formations, and one about the floral studies and the trips made by Linnaeus in the vicinity; others dealt with the industries, among which fishing on the east coast of Skåne received special attention. But in the entire series nothing made such an appeal as did the folk traditions and the folk songs.

The course made use of the material contained in the city museums. A large and varied exhibition was provided showing ancient customs and equipments; and about one hundred volumes dealing with the locality were brought together.

A report from the course in the Home Locality at Engelholm, in 1912, shows that similar lines were followed. But here were no fewer than three exhibitions: (1) A gallery of paintings comprising 91 numbers; (2) an exhibition showing the history of the place in its development; and (3) another in the articles of sloyd produced in this vicinity, in connection with which prizes were awarded. The formal lectures treated antiquarian and historical topics—the history of the city and country. The series included reminiscences of noted men connected with the place, also the substance of old sagas and traditions. The State geologist gave a survey of geological conditions thereabouts, followed by talks dealing with forestry, agricultural and industrial resources. The series was concluded by a festival in which a conspicuous part was taken by a parade of knights in historic garb. Three counties were included; local banks provided a part of the expense; the Central Bureau for Popular Lectures contributed several hundred crowns. There were 222 participating members, 30 of them being teachers.

Some of these courses have departed both in scope and direction from the original aims. In 1916 the programs of those given under the auspices of the National Teachers' Association, while retaining the original feature of work in local interests, assumed the character of teachers' institutes. Another class has enlarged its scope so as to include not only matters of local prestige but also natural history, lectures on languages, civil history, methods, and class-room practice.

The organization that has brought these courses to their present advancement is Norrland's Society for Locality Study, founded in 1909. Its purpose is to gather funds for research in local history, to exploit this scientifically through library and school activities, and to disseminate knowledge about the province with the view of fostering love for home and country. The society has departments for archeological study, research in natural history, the study of provincial dialects, folk music (registering songs and melodies), library matters, and finally education. In a few years it has been able to collect specimens for a considerable museum, the expansion of an older collection—the numbers amounting to 9,000. In addition the members have an open-air museum comprising about 60 acres, from which is a magnificent view of the city, the surrounding country, and the sea. Here they have brought the buildings of a farmstead from Ångermanland, a cattle shelter from Norway's peculiar pasture highlands, and a Russian tower of wood construction, with belfry. Then, too, they have completed a natural museum with a collection per-

taining to history, zoology, and geography, and a library about Norrland. In 1913 this library numbered 12,000 volumes.

The educational means here provided have developed from the idea that the local parish school should bear, and be fitted to impart, a clearer impress of the locality. Teachers coming from the training schools have not received anything there calculated to help toward such impression. With the view of ordering the work toward these ends, four groups of subjects were instituted:

1. The natural history group: Geology and geography, to which later have been added surveying and map drawing, botany, zoology and meteorology.

2. The philosophy group: Swedish language with paleography; the study of provincial dialects; anthropology.

3. The historic group: The study of antiquity; Swedish history and sociology; statistics of history; local history.

4. The pedagogical group: Psychology; the history and theory of education; technique of studies in the home locality.

The plan of this work comprises lectures and exercises connected with excursions, all with the purpose not only of imparting information but of spurring the members on to independent study and research. Hence whoever wishes may apply for examination both in what he has formally gone through and what he has done independently. The total time of the course is four months, divided between two summer vacations. Four or five lectures, together with the exercises, constitute approximately the day's work. It is expected that all the members will be teachers from the provinces. To carry into practical effect the plan thus outlined, it was found that more money was required than was at the disposal of the association, a difficulty temporarily overcome by receiving permission to use part of the funds for the advanced training of teachers.

In this way the home locality course at Härnösand was started in June, 1914. The outbreak of the World War caused the work to be interrupted, so that a part of the plan had to be deferred until the following summer. But from that time until the present the work as begun has been maintained in steady activity. The number of those enrolled has grown until it includes not only people from Norrland but also from other parts of the country. The regulations for admission require that the candidate shall have served as a teacher at least two years and that he be below the age of 45.

The State aid which each member receives is somewhat less than in similar organizations in Denmark; there each one received 125 crowns in 1915. Those who take part are paid one-half of the traveling expenses where they have more than 60 miles to come. On the other hand, the instructors receive higher pay in Sweden than in

Denmark—15 crowns for each lecture and 15 crowns for each double hour of laboratory work. Over and above this, instructors living at a distance from the district receive traveling expenses in full. The teachers who have participated are preparing outlines of all lectures and publishing them as handbooks for the work in its entirety. These are published by Norrland's Association for Locality Study, and are of value for other forms of instruction besides those here discussed.¹

This mode of school activity has occupied so conspicuous a place among Swedish school conceptions that educators have contemplated making it the central unit in the projected university for summer work. But the consideration came up that the very nature of the work requires that it be done in specific places and not at a central point remote from such localities. Hence the courses are coming to be established at community centers and to depend on these for expenses. The work they do for teachers is not primarily intended to remedy defects or inadequacies in training, but to supply an element of local inspiration and interest that teachers' training schools have not yet attempted.

THE DEVELOPMENT OF THE COMMUNAL MIDDLE SCHOOL.

The modern (real) school created by the enactment of 1904 and providing a six-year course for children within the ages 9 to 15 has not, according to the opinion of school men in Sweden, altogether fulfilled its purpose of giving advanced instruction suited to positions in general civil life. It was accessible only to pupils who lived in or near a larger city; it did not sustain any organic relation to the folk school except in so far as its first three classes could serve as preparation for entrance. Its real purpose was taken over and filled by private schools for boys and girls or by coeducational institutions which, upon meeting specified stipulations, received State aid.

In Sweden, as in Norway and Denmark, there has long been a movement in the direction of requiring the folk school to furnish the basic instruction needed for admission to secondary schools. This movement assumed legislative form in the Riksdag of 1908 in a proposition for State aid to communal middle schools. As this step was taken late in the session it did not come up for formal consideration till 1910, when State subvention was granted to this type of schools. One significant effect of the act was to enable smaller cities and even villages to establish a class of schools that would bring their pupils to a point of advancement equal to that of the modern school. Between the years 1910 and 1916 the number of

¹ Teachers' and students' handbooks, indicating the scope of this work with plan for presenting its subject matter, have already appeared, such as, "Handledning vid Undervisningen i Hembygdskunskap," Parts I and II, by L. G. Sjöblom, Norstedt & Sons, Publishers, Stockholm.

institutions of this class doubled, increasing from 15 to 31. In consequence of their rapid growth the State appropriation was, during the same period, increased from 10,000 to 100,000 crowns.

Such schools are generally established by the reorganization of a former private coeducational school or a higher elementary school. As described in the order granting State aid—

The communal middle school is an educational institution founded and maintained by the community, aiming to impart such education for citizenship as the modern school emphasizes: it continues as a superstructure to the elementary school, and, with respect to entrance requirements, presupposes the advancement attained in the highest class of a fully equipped elementary school. It is to comprise four one-year classes above the elementary grades, each school year to consist of 38 weeks.

At first thought it would seem as if its parallelism with the modern school would result in a wasteful duplication of types. When, however, pupils who are expected to pursue advanced studies leave the public school, they are thought of as making a departure from the line of public-school continuity. They come under the charge of teachers who have had longer training; they are required to pay tuition fees; their associates come, in most cases, from homes a little better off economically, and they can hardly avoid the feeling of social differences. The communal middle school will furnish them the advanced instruction without any departure of this kind.

In the communal middle school the schedule is more flexible, adapting itself more easily to local demands. The appended schedule comprises the two types, the four upper classes of the modern school with the four classes of the communal middle, giving the average hours in the latter.

Subjects.	Modern school.					Communal middle school. ¹				
	III.	IV.	V.	VI.	Total.	I.	II.	III.	IV.	Total.
Christianity.....	3	2	2	2	9	1.7	1.8	1.9	2.0	7.4
Mother tongue.....	6	4	3	3	16	5.5	4.1	3.2	3.1	15.9
German.....	6	4	4	3	17	7.3	5.3	4.5	3.8	20.9
English.....		5	5	4	14		4.3	5.0	4.2	13.5
History.....	3	3	3	4	13	3.0	2.5	2.8	3.5	12.2
Geography.....	2	2	2	2	8	2.1	2.1	2.0	2.0	8.2
Mathematics.....	5	5	4	5	19	5.0	4.9	4.3	5.0	19.2
Biology.....	2	1	2	2	7	2.2	1.5	1.9	1.8	7.5
Physics.....		2	1	2	5		1.8	1.2	1.9	5.4
Chemistry.....			2	1	3			1.8	1.1	3.2
	27	28	28	28	111	27.3	29.0	28.6	28.5	113.4
Penmanship.....	1				1	1				.7
Drawing.....	2	2	2	2	8	1.8	1.8	1.7	1.7	7.0

¹ Lack of uniformity in the schedules of this type makes it necessary to reach an average in computing the hours, hence the fractions.

Though the communal middle schools are under the control of the State supervisory board, which appoints their superintendents and inspectors, they are in other respects dependent only on the communities. The training of the teachers and their eligibility for

appointment have elicited much discussion but have finally been embodied in regulations as follows: To be appointed as permanent teacher in any subject the applicant—

(a) Shall meet the requirements for appointment as assistant or subject teacher of a State school, but that the time of service required for such appointment may be substituted by service in a folk school.

(b) Shall have passed through a normal school and continued at a communal middle school, higher folk school, or a similar institution.

(c) Shall have studied the middle-school branches at the university and received good grades or passed the teachers' examination with good grades or in some other way acquired educational efficiency.

These regulations are to be in force until the question about the further development of the folk school shall have received a satisfactory solution. The communal middle schools may be organized either for one sex or as coeducational.

Their influence on the school system as a whole is already apparent; they have made it possible for the folk school to move on more directly toward educational aims in this country associated with scholarly prestige; they have made the connection between the elementary and the modern school closer, with the possible result that in the near future many of the six-year modern schools will be reorganized in accordance with their plan.

THE OBLIGATORY CONTINUATION SCHOOL.

A movement parallel with the foregoing has also been in progress for years and has finally resulted in the enactment of a law creating an obligatory continuation school. On May 8, 1918, the Riksdag passed a bill providing for such extension of the scope of the folk school as would bring Swedish youth to a further stage of educational advancement; the courses of instruction to be devised with special view to the needs of present social and economic life. The far-reaching changes and modifications involved in putting into effect the details of this law are to be carried out so as to be in full effect by the end of 1924. The State Supervisory Board has issued a compendium for teachers and school authorities, instructing them in the operation of the law and in the manner of effecting the changes contemplated.

The aim of the statute is the organization of a superstructure to the folk school to give young men and women vocational and civic instruction. It is a part of the aim already set up by teachers and philanthropic organizations; namely, to make use of the trades and occupations to keep the young in law-abiding and moral walks of life. The young man who acquires a trade or other vocational fitness has

not only thereby gained security for the future but he will also gain inducements toward correct living.

Touching the continuation school two principles are kept in mind as basic: To furnish training that will lead to the mastery of a trade, and to advance the folk school subjects to fuller completion. The higher folk school also comprised in the provisions of the statute will be a parallel type, with the advantage of a longer period of instruction and more comprehensive courses. It will be adapted for children who, after finishing the folk school, have the opportunity of giving some further time to their schooling. Like the other kind, this will also be organized as of two types: One with a trade in view, the other for general training. In accordance with special local needs and conditions it will comprise one, two, three, or four years, with 36 weeks a year.

The continuation school comprising a two-year period will be obligatory for all pupils who complete the elementary school without taking up studies in a school of some other kind. It is to have, as a rule, 180 instruction hours a year. The State appropriates the full amount of salaries for the teachers, but the community furnishes buildings and instruction material. The courses lead to the trade schools, also comprising two years, with 6 to 12 hours' instruction a week. The departments which the trade schools are to embrace will be of four classes: A school for industry, a school for trades and artisans, a school for commerce, a school for household work. The law recognizes the need of subordinate branches under each class and leaves the greatest freedom for such specialization as each calling or each locality may require. So far as the household work is concerned, it is for the first time placed on a level with other trades in respect to credits. It is made accessible to all girls who are not employed in some trade, industry, or business, or who are not receiving instruction of a kind equivalent to the trade school.

While these schools are made obligatory for the pupils, they are not for the communities for the reason that many of the latter are unable to bear the expense that the founding of such schools would entail. As the trade school will be attended by pupils above the elementary school years, many of them will be employed in the trades during the period of attendance. For this reason, their employers are required to release them from their duties for periods sufficient to participate in the instruction. The State contributes two-thirds of the teachers' salaries and from one-half to two-thirds of the expense of maintenance, while the community provides the buildings and the rest of the expense for maintenance.

In order to prepare the teachers and specialists needed to take charge of the work, advanced technical training schools and gymnasia are to be established. For the early instruction, business schools

will be started, connecting in their advanced courses with the commercial gymnasia already existing. The nature of the work is such that teachers who have both educational and technical training will be required.

There are already many continuation schools in Sweden, some private, others public, that have practical instruction in the trades as their aim. Many of these are excellently equipped through the munificence of private donors. The law just passed will, however, extend vocational instruction to all the children of the community. Its full effects will appear in added facilities for the work in reconstruction in which each community will have a share after the war.

Further reforms in prospect.—Though the provisions for new educational facilities created by the laws of 1908 and 1918 were timely, the educational press of Sweden is discussing still further reforms. Several problems rise immediately out of the relations the communal middle schools and the obligatory continuation schools are to sustain to existing school types. As early as 1913 and 1915 there were intimations in the Riksdag that State aid for schools duplicating each other's work could not be expected. The question, moreover, as to how the modern school subserves its purposes has become prominent. It is pointed out that its final examination comes so early in the life of the pupils that they are not mature enough for the promotions and positions for which this examination is intended to be the qualifying test—admission to schools specializing in agriculture, technology, postal and telegraph training, positions in the railway and banking service. Again, the schools for the education of girls need reforms with the view of reducing the expenses of attendance and making it possible for the teachers to become better prepared, and in general for transferring the instruction from the private schools to those of the State.

Further development in the system must, in consequence, have regard to the relation among the various types; it must secure a better ordering of the education of girls; it must reconsider propositions earlier laid before the Riksdag about additional main lines of study in the gymnasium as well as of the articulation between this type of school and the preparatory schools from which it continues.

The advocates of these reforms have in mind, evidently, the basic principles of the uniform school (*Enhetsskolan*), which requires organic and direct continuity between institutions of different degrees of advancement with the folk school as their common basis and preparation. They emphasize the further principle that the work in the secondary schools should be grouped in courses such that only those best endowed are induced to select work leading to the advanced high schools and the university. With the same purpose of selecting the best gifted for higher studies, admission to the

gymnasium should be made dependent on natural endowments, whereby an undesirable increase in those immatriculating in the advanced institutions would be counteracted. The practical reforms already carried out in the communal middle schools and the obligatory continuation schools will assist in the further reforms here mentioned, which are mainly the theoretical completion of the former.

EDUCATIONAL ACTIVITIES APART FROM THE SCHOOLS.

Much educational work is conducted by teachers' associations and other groups outside of the scheduled work of the schools. These organizations are generally well established, and are usually supported by funds from the State or by the income from endowments. Their activity is not at all limited to the occasions of their periodical sessions or to the business that rises immediately from these, but they are organized with permanent offices, with the view of attending at any time to such matters as come within their scope. A few of these organizations in Sweden are the following:

The Society for Physical Training. Founded in 1913, and in 1914 united with the Swedish Society for Open Air Games and Health Education. It receives a State subvention of 1,000 crowns a year. Its purpose is to work for rational physical training. Address, Stockholm.

The Society for School Gardening. Endeavors to secure such further reorganization for gardening in connection with elementary schools as this work obviously deserves. Address, Nyqvarn.

The Central Society for Social Work. Disseminates information on social questions with the purpose of helping to solve important social problems. It organizes lecture courses among all classes of society. State subvention, 2,000 crowns. Address, Stockholm.

The Society for Folk Instruction. Maintains a lecture bureau for popular lectures on scientific subjects; arranges for the purchase of libraries for schools and societies; supports traveling and permanent libraries. It receives State and community aid to the amount of 34,000 crowns. Address, Stockholm.

The Society for Temperance and Education. Teaches temperance and morality on the basis of a Christian outlook on life. Its work is accomplished by literature and lectures, programs and entertainments, traveling libraries and traveling school kitchens. Resources, several hundred thousand crowns. Address, Vasagatan 9, Stockholm.

The Society for the Promotion of Folk Instruction. Publishes books and pamphlets of an educational character and discusses methods and means of improving the work of the schools. It maintains a girls' school with a three years' course, the last year devoted to practical instruction in occupations for women. Resources, 110,000 crowns. Office at Stockholm.

Teachers' Association for Folk High Schools. Encourages advanced instruction in branches taught in the folk high schools and the agricultural schools.

Teachers' Association of the Communal Middle Schools. The interests of this class of schools and their teachers are included in its aim.

The Society of Public School Inspectors. Address, Malmö.

Society of City School Inspectors. Address, Linköping.

Women Teachers' Mission Society. Its purpose is to train teacher missionaries. Address, Gothenborg.

The Association of Women Teachers. Promotes the educational and economic interests of women teachers throughout Sweden. Address, Lidingö.

The Congress of City Teachers. Founded in 1906. Cooperates in matters pertaining to the interests of education in the cities. Office at Gothenborg.

The Friends of the Swedish Folk School. Its aim is announced as follows: "Moved by the sincere conviction that education is inseparably united with a Christian life, the society will work for educational ends in accordance with this principle, so that Christianity in the folk school may be maintained in its Biblical fullness and permeate all instruction and, hence, become the life of school, home, and society." Address, Stockholm.

The National Teachers' Association of Sweden. Comprehensive in its scope and activity. Some of the foremost educators are on its directing board. It has a membership of about 14,000 and funds to the amount of about 70,000 crowns. In the course of its work, the association has developed so that it is now divided into a number of permanent bureaus and committees, each made up of specialists within the field assigned to it: (a) The literature bureau, with a membership of about 650, attends to the editing and publishing of educational publications. (b) The editorial committee prepares handbooks for teachers. (c) A special committee plans and directs courses in drawing. (d) A committee plans and manages courses in singing. (e) A special committee has charge of the school museum at Stockholm. (f) A Saga committee cooperates with a publishing house in Stockholm in collecting and publishing suitable literature for children and the young. (g) A committee has charge of the disposition and use of the traveling libraries. (h) A committee on school excursions plans and manages visits of pupils and teachers to other schools and other countries. (i) A board of economics has charge of the finances of the association. (j) The information committee confers with, advises, and helps teachers in economical and legal matters. (k) A life insurance committee advises teachers and looks after their life insurance interests. (l) The correspondence committee has the duty of bringing about suitable cooperation with teachers' associations of other countries.

Through these several branches the association takes the initiative in educational endeavors, conducts discussions, issues reports, and formulates educational measures for the consideration of the State supervisory board. In this way it has, for instance, done efficient work in the interest of the higher folk schools and in securing the enactment for obligatory attendance at a continuation school. The 15,000 crowns allowed by the Riksdag for teachers' continuation courses is due to the efforts of the association. By means of this sum the association has established teachers' libraries, teachers' courses in drawing, singing, and courses in practical labor. Besides instituting lecture series in studies in the home locality in several centers, the association is cooperating with the State supervisory board in efforts to secure a normal plan for locality study.

During 1913 the association conducted an investigation on the condition of the pupils' health. It found that certain steps toward ameliorating the conditions should at once be taken, and immediately submitted requests to the school committee on the care of the pupils' teeth. In its official organ it has combated the use of tobacco among pupils; it has caused the privileges of the pupils' health colonies to be more generally extended to children in poor health.

The association has accomplished much for its members and for the schools in general in campaigning for adequate salary increase in view of the high prices of recent years, and also in encouraging teachers to remain at their posts of duty instead of accepting tempting offers of more remunerative employment.

DENMARK.

GENERAL SURVEY OF THE EDUCATIONAL SYSTEM.

Administrative boards representing both the church and the state exercise control and supervision over the schools of Denmark. The State adopts the regulations governing programs and courses, the length of the school year, and the distribution of the vacations; it provides the facilities for the training of teachers, passes on petitions for grants and subventions, and attends to the general management of all the economic matters of the schools.

In the several communes, local school matters are dealt with by parish commissions. In the cities the commission consists of the pastor, the mayor, and two or three lay members; in the rural districts it is made up of the pastor and one or two lay members. Through these authorities the communes exercise a degree of supervision and inspection that in other countries is usually vested in officials of the State. Immediately above the parish boards stands the county council with its school direction, whose chief function is to appoint teachers from lists supplied by the parish and to have charge of the apportionment of teachers' remuneration and pensions.

Through the *ex officio* position of pastors and bishops the school stands in close relation to the church. In each diocese the bishop visits the schools and informs himself directly concerning their educational needs, how teachers and school boards are attending to their duties, etc.

The status of religious instruction is a subject of recurrent discussion in the journals of education. The law as it reads now permits exemption from instruction in the case of children whose parents do not belong to the state church, on the condition, however, that they in some other way receive equivalent knowledge of general moral and religious truths.¹ In order to give the teacher freedom in conducting the recitation, no formal examinations are required in this subject and no grades are issued.

In former years it was held as self-evident that the schools should teach religion as the foundation for training in moral stability of character. But later views insist that pupils should be left independent of the problems of religion and that the subject should be taught as a part of general history, leaving purely religious instruction to the church and the home. The majority of teachers, however, hold that instruction as hitherto conducted should be maintained, even though many of them would gladly be independent of the ecclesiastical supervision now exercised over their work.

¹ *Handbog i lovgivningen om den danske folkeskole, 1917.*

The first compulsory school law was passed in 1814. As modified by later enactments now in effect, it requires children to attend from 7 to 14 years of age, the period comprised in the elementary school. In the event of privation or sickness prevailing in the home, a pupil may be excused from attendance at school. A formal release from attendance may also be granted before the expiration of the required school period. The responsibility for granting such excuses for nonattendance rests solely with the school commission.

These regulations have been so strictly enforced that there is virtually no illiteracy. A careful record of absences is kept and reported, and when they are not accounted for in a satisfactory way fines are collected. For the year 1914 the sum of 15,000 crowns¹ was thus collected in Copenhagen. In other cities and in rural communities the sum thus brought in amounted to 79,000 crowns.

The length of the school year is 41 to 46 weeks, about 246 days. The local board determines the proportion of whole and half days per week in the district, often making it four whole days and two half days in winter, and three whole days and three half days in summer. The number of hours required per week is a minimum of 21, not counting gymnastics, drawing, manual training, sloyd, and household work for women. The regulations also fix the maximum number of pupils in a class as 37 for schools in the country and 35 in the city.

At the age of 11 the pupil may enter on a four-year course in the intermediate school (Mellemskole) with one year extra for those who desire to prepare for the modern school (realskole) examination, which admits the pupils to the gymnasium. The gymnasium offers courses along three lines: The classical, the modern language, and the mathematical-scientific. School reforms now under consideration propose to reduce these lines by the omission of the classical, including its subjects under one of the two remaining ones. The same trend in the secondary schools moves in the direction of giving more time to the study of English and German by omitting Latin. How the status of German will be affected by the war is not clear nor can it readily be forecast from the reports that are at hand.

There are 48 gymnasia, of which 8 offer all three lines, 29 offer 2, and 11 only 1. The total number of secondary schools in 1912—commercial, private, and State—was 218, of which 146 were coeducational, while 32 were exclusively for boys and 40 for girls. Tuition in the intermediate school is 120 crowns per year; in the gymnasium it is 150 crowns.

¹ A crown is equal to 26 cents.

In response to the demand for practical training for those who have completed the elementary course, a number of trade schools, continuation schools, and evening schools have sprung up. As the pupils of these are generally wage-earners, many trade schools have the schedule of hours so arranged that a pupil may take up selected studies without discontinuing his regular employment in the factory or the shop. The attempt has therefore been made to extend the schedule so as to make use of the evening hours, giving rise to a considerable number of evening schools. For 1912 there were 798 throughout the country. But as the teachers of these schools and the pupils that attend them are employed during the day, it has been felt that other forms of continuation schools offer better working conditions. Again, the evening schools, by stressing almost exclusively the remunerative side of the occupation in which the pupil is engaged, do not respond to the need for more cultural activity, which asserts itself, even in these practical associations.

The objections against permitting the pupils to give a part of their time to remunerative work have not been overlooked. In 1908 an investigation by Denmark's Statistical Bureau showed that of a total of 370,440 children 45,512 worked certain hours a day for parents and guardians and that 65,397 had employment with others, hence less than one-third of the pupils had to perform labor not connected with school assignments. In so far as the investigation was completed, it did not substantiate the supposition that pupils employed under the child-labor regulations were thereby handicapped in health, development, or progress.

One class of institutions in Denmark has attracted the attention of the whole world, namely, the peoples' high schools, which, together with the agricultural schools, have greatly advanced the farming classes in prosperity and prestige. In Copenhagen is a veterinary school of high rank. There are professional schools for medicine, dentistry, and pharmacy; also noted technological and navigation schools. The Academy of Fine Arts and the Conservatory of Music rank high among institutions of their kind.

The University of Copenhagen comprises the faculties of theology, law, medicine, philosophy, science, and mathematics. The number of students, including those regularly matriculated and others, is upwards of 3,000. Its courses run through periods of 5 to 6 years. It is a center of research and scientific activity, which already numbers many scientists who have made momentous contributions in their several fields. In the United States these names are well known: Meyer in medicine, Lorenz in physics, Thomsen in chemistry, Höffding in philosophy and psychology, and Brandes in literature and criticism.

THE NATIONAL POLYTECHNIC INSTITUTE.

This institution, ranking with the university in scope and advancement, has given direction to much of the scientifically constructive work in the northern countries. In 1918 it had a faculty of 46 professors, 39 instructors and 25 assistants, with a number of laboratory and machine shop assistants and attendants. Broadly speaking, the instruction embraces four departments with groups of courses in factory engineering, mechanical engineering, architectural engineering, and electrical engineering. To complete the work in any one of these lines, requires four and one-half years. The subjects taught include all those connected with theoretical and applied science. Counting the courses taught by lectures, the series of experiments and laboratory exercises, the number of subject units offered during 1918 amounted to about 600. A few of them are: Architecture and iron and steel construction; ship building; road building; house building; electrotechnics; heating and ventilation; municipal hygiene engineering; technical chemistry; machine testing; testing of materials; planning factory plants; theory of dynamic motion; theory of experimentation, in which the most common methods of making experiments in physics are explained; courses for workers and specialists in machine construction and factory engineering; chemistry for specialists in mineralogy and geology; technical chemistry applied in the study of fertilizers; glass composition and characteristics, melting and decoration; reducing ores and the extraction of chief products and by-products; distillation of peat deposits; purification and manufacture into gases and oils; and agricultural bacteriology; nitrogen-producing bacteria. These are only a few of the remarkably comprehensive list of courses.

Anyone who can give satisfactory evidence of being prepared to profit by the work is admitted. To register for examination, however, certain specified preparatory subjects are required. The cost of instruction, including laboratory facilities, is 50 crowns per semester for those registering for examination. The fee for a course of one lecture per week is usually three crowns per semester; for a greater number of lectures and laboratory hours the charges are at proportionate rates.

Recently a new degree has been instituted, that of Doctor of Technics, conferred on those who successfully pass the final examination and whose written theses are accepted. Foreign students, who present sufficient evidence of having completed the prerequisite studies and of being engaged in scientific researches approved by the authorities, may enroll for this degree.

Any one holding the degree of Doctor of Technics has the right to offer courses of lectures at the Polytechnic Institute after application in accordance with the rules of the institution.

A number of funds have been provided for the purpose of encouraging students to enter this institution. The American-Scandinavian Foundation of New York has liberal funds available for persons taking up studies in this or any other institution in the Scandinavian countries.

THE PEOPLE'S HIGH SCHOOL.

These institutions have long had the attention of educators from many countries. They have been regarded as one of the chief agencies that helped Denmark to recover from the disastrous wars of 1864-1866. To them, in a large measure, is due the achievement of making the meager soil of the country so productive as to raise the farming population from privation to a fair degree of comfort. The model farms, the dairying and packing-house industries, which have become the pattern for other countries, have been set down to their credit. Educators of the war-stricken countries will find in these institutions not only efficiency in the usual sense, but some of the basic elements that make for recovery and reconstruction.

The system of schools.—Though something may be credited to the system, as will be pointed out, the obvious achievements of the schools are mainly due to other causes. They have no class-room procedures that can be considered superior to the other schools of this country. Their teachers are not better trained; their experimental and laboratory facilities are not more ample. The agricultural schools are just as practical, and they do many things better. The vocational and trade schools are more direct in the insistence on the productive application of what is learned. The well-equipped technological institutions of Denmark supply better training in more advanced courses.

But the system establishes a relation between the pupil and the instruction that in itself promotes achievement. At the age of 14, or earlier, the pupil leaves the elementary school, usually to take a position as an apprentice in one of the trades or as an employee on a farm. During several years of the adolescent period he is employed in manual work, attaining development of body and also some definiteness of purpose. Most of all his experiences, often under a severe taskmaster, create in him a desire to lift himself above the restrictions in which he toils. Then at the age of 18, or later, he may enter the Peoples' High School to improve his opportunities, and he then readily meets the one entrance condition the institution imposes, namely, a desire to learn.

Where he sees an opening for useful work, he does not feel hampered by degrees or ends to be attained in the final examination. Older people may come to the high school to get information pertaining to some line of work they have in hand, and stay during the

days or weeks necessary to obtain the full aid of the school. This adaptable character makes it possible to take cognizance not only of the special needs of a group of farmers or fishermen, but of such particular conditions as govern the industries of any locality.

The spirit of the schools.—It is claimed that they have discovered the way to educate the young men back to the farms, and, if this be true, it is worth while to note how they do it. Some main causes are principal and some are contributory. In the first place, all their courses and experiments are associated with the sense of the dignity of labor. They teach, not caste, nor self-conscious pride that looks for contrasts and distinctions, but a simple love for the farm, the forest, and the sea—the dignity of the farmer's occupation, let other occupations be what they may.

The schools begin their recitations with songs, thereby investing the work with a zest that could not easily be obtained in any other way. This practice perhaps furnishes a psychological stimulus to the students and aids cooperative effort. Poetry and singing, in fact, lie close to all they do in the classroom as well as in the evening voluntaries. The students take their poets earnestly, seriously, while we, too often, only tolerate them. But poetry prepares the way for the Danish high school teacher to impress his pupils with a sense of individual moral responsibility, which is the only real basis on which cooperative work can be accomplished. People must trust each other and be able to turn aside from their own advantage and manifest an interest in others and the cause, if banking or marketing cooperation is to be successful. It is not some one's technical skill or grasp that makes such an enterprise possible but rather the spirit that pervades it.

We are accustomed to treat our school subjects strictly according to their character. Whatever is matter-of-fact is dealt with as such without any attempts to idealize it. We relegate sentiment to what is held to be its own proper place. But in the Danish schools geography, sociology, poetry, and love of country come into very human relations during the school hour. These schools are able consistently to deal with the main subject in its proper character without losing sight of its points of human connection.

As the principal facts about these institutions are readily available,¹ it may suffice merely to mention that there are about 80 such schools in Denmark, about 45 in Sweden, and 24 in Norway. They are started by public-spirited members of a community, who call a mass meeting, and raise the necessary funds by subscription. Afterwards the schools are accredited by the State and receive State aid. They

¹ A School for Grown-ups. By Philander Priestly Claxton. In Conference for Education for the South. Proceedings, 1909, pp. 198-203.

The Educational System of Rural Denmark. By Harold W. Foght. U. S. Bureau of Education, 1914.

give a six months' course in the winter for young men, and a five months' course in the summer for young women. In some of these institutions the courses cover two years; in others, one year. Worthy students receive State aid. An inspector visits them and reports on the work. The Government, however, does not interfere with the arrangement of subjects, courses, or hours, but satisfies itself with knowing that there are devoted teachers and authorities and permits them to go on without interference.

SCHOOL EXCURSIONS.

School journeys have become a part of the year's program in most schools. They are the realization of a principle which is gaining the general approval of educators in this country. Teachers and pupils, it is held, find some of their best opportunities for training and instruction in material lying outside of books and classrooms.

Every autumn, toward the middle of September, there is an excursion of two days for the boys of from 10 to 12 years, accompanied by a few of the larger boys, who make it as a final trip. These instruct the younger ones in the details of the journey, help in the discipline of the party, and encourage their younger companions in endurance while on the march, so that the latter may be trained to take part in the grand excursion coming later. If a pupil should show himself much fatigued by the trip, he is not permitted to take part in the later excursions. One of these comes in the spring and lasts seven days; another during the summer vacation and lasts from three to four weeks.

Usually there are about 30 or 40 pupils in the party and three or four teachers, the number taking part in the shorter trips being, however, considerably greater. As preparation, the pupils are instructed in the route with the map before them and otherwise helped to be benefited by what they are likely to see. They prepare a guide pamphlet of their own, with maps, descriptions, and also regulations to be observed while en route. Each pupil is required to keep a day-book, both for purposes of gaining clearer impressions and for acquiring a souvenir of the trip. A fine is imposed on those who do not observe the regulations and a prize awarded to the one who furnishes the best description. Each pupil carries a knapsack with his equipment and also provisions for a week, if the trip is to last that long. A day's march is often 37 kilometers (23 miles)—sufficiently long, as it would seem. Every two or three hours they rest an hour by some spring or stream, lunch, bathe, or, at least, take a foot bath. Toward 6 o'clock the party halts at a hotel and takes dinner or supper, usually a frugal meal. At 9 o'clock everybody is expected to be in his room, where he may not talk so as to disturb others, though he may converse quietly, and write letters or write the day's account

in his diary. The program indicates the hour for breakfast, and it rests with each one to get up and appear in time, for the members of the party are often lodged at different hotels.

For a trip of two days the expense of each pupil is 4 or 5 crowns a day; for the longer summer journeys, it is about 5 crowns a day. The journeys are not limited to Denmark, but include railway and steamship trips to Norway, Sweden, Vienna, Berlin, Milan, etc. Everything is carefully planned in advance, so as to reduce the expense.

The places included in the itinerary are those that afford an interest from the point of view of history or nature, so that the teachers may connect them with what the pupils do at school. In foreign countries practice in speaking the vernacular is eagerly sought. Visits are made to industrial establishments and operations and processes are explained. Notes are kept on the places visited, history, life of the people, natural resources, markets, etc., which are afterwards worked up into papers and essays. Teachers find that on a trip pupils show much greater interest than while on the benches of the classroom. On their part, too, pupils learn to know and to appreciate their teachers better.

Of a similar order are children's vacation journeys, originally intended to give poor children of the cities the advantage of a few weeks in the country. Every year about 25,000 boys and girls from the schools of Copenhagen, Frederiksborg, and Aarhus obtain free transportation by railroad or steamboat to the country to pass four or five weeks with families who extend hospitality to them. Usually the parents of the children make arrangements with some family willing to receive them during vacation, but a great many are furnished accommodations and entertainment through the efforts of the schools. At a certain time of the year the children inform the principal of their wish to spend some time in the country, of the place they desire to visit, and possibly the family with whom they would like to stay. The principal takes these suggestions into consideration, and with the assistance of the other school authorities prepares a list of the names to be submitted to the railroad or steamship companies with a request for the necessary tickets. These tickets are sent to the schools. The companies run special vacation trains carrying the children to their summer destinations. In order to reciprocate, the people of Copenhagen have formed a "Society for Entertaining Children from the Provinces." This society has met with great success. In recent years 163 village schools with more than 8,000 pupils have been benefited by its work. The transportation companies have been accommodating and generous. The stay in Copenhagen is at the expense of the society, which receives a subvention of 4,000 crowns from the city of Copenhagen and lesser sums from other cities.

TEACHERS' TRAINING, SALARIES, AND STATUS.

Teachers of the elementary schools are trained in the normal schools, of which there are 4 public and 15 private, offering three-year courses. Tuition at the private normal schools is 150 crowns a year. To be admitted the applicant must be at least 18 years of age. The teachers in the State secondary schools are educated at the university. Examination in specified academic subjects are required; then follows the special pedagogical training with practice teaching in some school approved by the university.

As new subjects have been added to the curricula and new types of schools developed, there has come to be an insistent demand for better training of teachers. It is not complete enough, the critics say; it includes no instruction in a foreign language, and, in general, it is too limited in view of the rapidly expanding field of education, both in practical and theoretical directions. Again, the teachers' colleges have too decidedly an academic character. The discussion of inadequacies of this kind have thus far led only to the regulation of 1913 requiring a strict entrance examination for admission to these institutions. By means of special courses in methods and practices the teachers have, through their individual efforts, tried to keep abreast of the progress made in their profession.

While the teachers' compensation, here as elsewhere, has been inadequate during the recent years of high prices, requiring special enactments for an emergency increase, the laws provide a fair competence during normal years. Here as in other Scandinavian countries the salaries and the eventual pensions are so regulated that a position means a certain salary, with periodical increases and, upon attaining the age limit, a retiring allowance. As a prerequisite for an appointment that places him in line for this remuneration, the applicant must have passed the teacher's examination and served successfully as a teacher during four years.

The prospect of a periodical increase in salary and a final retiring competence induces the teacher to look upon his calling, not as a stepping stone to something more desirable, but as a life work. He is also relieved, in a measure, of the petty annoyances of having to negotiate with local boards from time to time. Successive enactments have had the effect of placing the salaries on the basis of the needs and comforts which a person in the position of a teacher may reasonably expect. In a general way the remuneration is higher in Sweden, counting the successive increments for years of service. In all the Scandinavian countries there are, over and above the yearly pay, free home, garden, and fuel or the money equivalents of these. An interesting and significant part of the salary laws is the consideration given for length of service.

Through the courtesy of Supt. Holger Begtrup, of the People's High School at Frederiksborg, Denmark, the salary regulations now in effect, together with special enactments for 1919, are at hand. The fixed annual salary has for a number of years past been as follows:

For a rural teacher in the first salary class 900 to 1,500 crowns plus the teacher's home, garden plot, and fuel, with successive increments, which in the course of 20 years raise the salary to 1,900-2,500 crowns. For a rural teacher in the second salary class, 700-900, plus home, garden, and fuel, increasing in the course of 20 years to 1,700-1,900 crowns. Women teachers in primary grades (in rural districts), 500-700 crowns. Teachers in the cities of the provinces receive a basic salary of 1,600 crowns, increasing in 20 years to 3,000. Women teachers in the cities of the provinces, basic salary 1,500 crowns, increasing in 20 years to 2,000. A teacher in Copenhagen receives 1,800 crowns, gradually increasing to 3,600.

Besides the municipal "high-expense bonus," which, in places where it is granted, amounts to 100-200 crowns annually, the State, has during the same years also granted a high-expense bonus. It is paid to teachers under the civil-service enactment of 1917 and amounts to the following sums for 1918: Six hundred crowns for a married teacher and 400 for a single teacher, in no case, however, to exceed 60 per cent of the current salary. This addition to the teacher's salary has been further increased by recent enactments adding 120 crowns to a married teacher's salary for 1919.

This law then fixes the remuneration of a teacher in the cities for 1919 at the current annual salary increased by 25 per cent, plus 720 crowns for a married teacher (500 for unmarried teachers). To illustrate: A married teacher in the lowest salary class in the cities will receive for 1919, 1,600 crowns plus 400 plus 720, hence a total of 2,720 crowns. A married teacher in the highest salary class in the cities will receive for 1919, 3,000 crowns plus 750 crowns plus 720, hence a total of 4,470.

For 1919 a special addition will be made to the pensions of teachers, widows, or orphans entitled to annual stipends or pensions. According to paragraph 9, the bonus to be paid will be 25 per cent of the pension, provided this amounts to 2,000 crowns or more; 30 per cent in case the pension is 1,000 to 2,000; 35 if it is between 700 and 1,000, and 40 per cent if it is below 700; yet the bonus must in no case be less than 240 crowns. Again, the pension and the bonus together in any of these cases must not be less than that to which a person with lower pension may be entitled.

In attempting to follow the work of the elementary teacher closely enough to see what particular phases of it he emphasizes, the following facts will be noted:

1. Wherever possible the elementary teacher leads his pupils to a point of physical connection with what has been intellectually acquired. Excellent instruction material, he believes, is found in the physical properties of earth and air, plants and animals, local resources, traffic, and commercial relations. The pupils have a keen desire to see things, a characteristic to which the teacher can appeal, causing them, for instance, to watch the growth of a sprouting plant, by starting—it may be on a very modest scale—an aquarium or a herbarium. By bringing a bit of nature into the school, new impulses will be imparted to the children.

2. The Danish teacher stresses the unity and organized form of the subject matter. In the advanced elementary class the topic, for instance, may be Holland and her transformation from a stretch of coastal marshes to a region of fields, downs, and pasture lands. Following this in its development the struggle of the people will come into view, their means of subsistence and the causes that started the industries of the country and gave it its very appearance at the present day. In close association come topics about life in various parts of the country. In brief, Holland as a unit, an individuality, is presented with various aspects of life and development in causal relations, and all without attempts at speculative conclusions.

3. The Danish teacher insists on the cooperation of the parents. He endeavors to bridge the chasm between the school and the home by informing the parents by direct and honest statements just how their children are getting along. The reports of the standing of the pupils in the school, issued at fixed intervals, tell the story of the children's progress only in part. They do not come so closely home to the parents as the full explanations which are also furnished at fixed periods. The following are typical examples of the latter taken from *Vor Ungdom*:

In English X has shown diligence and interest; he has acquired a more correct pronunciation and better expression in his reading. But his progress is not as yet satisfactory. He is yet unskilled in English phonetics and in English spelling. He lacks readiness in the use of language, but he is fairly sure in grasping the correct grammatical construction of an English sentence, and he has fair ability to render it in Danish. By continued diligence he will overcome the difficulties the subject presents.

The progress made by Y in the German language is not very satisfactory; he lacks the power of combining expressions. (He translates the words by rote in the German word order.) His imagination is hampered so that in a connection where he knows all the words but one and the meaning of this one is fully clear from the context, he can not translate it. His eye does not sharply catch the words of the text, hence he constantly confuses *w* and *v*, *ei* and *ie*. He has difficulty in retaining what he has once learned, both words and grammar forms. He deserves praise for the interest and diligence he has shown, but he should be impressed with the need of working with greater concentration. In some respects he has made fair progress; his vocabulary has increased; and his knowledge of grammar and his pronunciation have improved. While his general advance must be stated as hardly satisfactory, the fact must not be forgotten that he has studied German only one year.

The general supervision and inspection exercised over the teacher's work have been the subjects of considerable criticism. In his recent book, "The History of the Danish Public Schools" (1918), Joakim Larsen speaks of the "school supervision as virtually the same as that found antiquated 100 years ago, notwithstanding the fact that both teachers and schools have become entirely different." Many teachers hold that the independence of the schools requires that the supervision should be exercised by men from their own midst. Both as regards the administration and the supervision, teachers as well as clergymen are of the opinion that they lack the immediate authority found in most other countries. The Government commission of 1909 recommended that a supervisor should be appointed for each district and that he should take the place of the rector on the local board. The recommendation was not acted upon lest it should restrict the independence of the municipal board; again, some of the clergy saw in the proposed reform the beginning of the separation of the school from the church.

ARTICULATION BETWEEN PRIMARY AND SECONDARY SCHOOLS.

Among the questions at present much discussed in school circles is how to effect a satisfactory continuity between the public elementary and the four-year intermediate school. There should be, it is felt, a more compact organic unity among schools of these different types; a division point should be provided so that a pupil at the age of 14 may discontinue, if he desires, courses reaching completion at that stage. The articulation should be so adjusted that pupils from homes of different social planes may be induced to attend the same school through the elementary period.

The present system of public-school education comprises several types of schools related in the following order of continuity and articulation:

I. The Folk School: (a) A common-school period for all children between 7 and 10. (b) Advanced division of the common school for pupils between 11 and 14, the end of the required period.

II. The intermediate school with a four-year course for pupils from 11 to 15.

III. A modern school division of one year for pupils having completed the intermediate school, leading to real-skole (modern school) examination. For pupils from 15 to 16.

IV. A three-year gymnasium for pupils from 15 to 18.

The law of 1903 was passed with the general purpose of effecting a closer union among these types and with the special purpose of making the folk school the groundwork of the entire system. As the same law provided for additional aid to the intermediate schools, one result was the creation of a large number of schools of this kind,

supplanting thereby a proportionate number of the private schools, which up to this time had prepared pupils for the modern school examination. The vogue they gained was not altogether welcomed by the teachers and authorities of the Danish folk school. These regarded the law as framed and passed mainly in the interest of the secondary schools. Political and social conditions rather than pedagogical, it was held,¹ had been the causes of the general expansion of the intermediate school. But its dual character of a preparatory school for the gymnasium and of a modern school had left it with a lack of organic unity that has been felt as a defect in its work. Moreover, the period of 11-15 is not satisfactory, because it fixes a division not at all in accordance with the changes that take place in the psychic life of the pupils at these years. The teachers of the folk school complain, further, that they lose a number of their best pupils who avail themselves of the opportunity to pass into the intermediate school at the end of the fourth year, thereby reducing the upper classes of the folk school to a form of subordination, both in number and prestige. Many of these enter the intermediate school without intending to complete its courses, the consequence being that they derive but little benefit from its instruction, and, in a measure, hamper the progress of others.

To remedy this defect, a regulation was issued requiring parents and guardians to sign an agreement upon the admission of their charges to the intermediate school to have them continue to completion. But protests and appeals against this requirement reached the supervisory board, with the result that the department in its letter of March 4, 1914, modified the order. While the creation of the intermediate school has had undoubted influence for the advancement of secondary education, its relation to the lower schools, particularly with respect to its connection with the latter, has not been satisfactory.

Discussions looking toward desirable changes were begun several years ago and are still continuing. In drafting propositions for alterations, the schoolmen have had to struggle not only with the usual principles of giving the period covered a rational and natural beginning, rounded completeness in itself, and adaptation for continuance, but also local demands urged by special provinces and, in particular, differences between cities and rural communities. In consequence, the plans could not be too rigid or inelastic in fixing, for instance, the number of weeks in the school year. The economic side, too, had to be considered, so that the plan would not entail too great expense by parent or community. Further, any abrupt departure from established school traditions would be sure to be opposed.

¹Joakim Larsen, *den Danske Folkskoles Historie*.

Social distinctions, which, especially in Copenhagen, have kept children from different social ranks in separate schools, have been connected with notions of restriction in the scope and character of the work to be done by this or that type of school.

In order to show the trend of development in the organic relations among the schools, several plans for proposed changes (one of them submitted in legislative form) will be briefly noticed.

One of the earliest suggestions came from Prof. Tuxen, the inspector of the Danish folk school, and may, therefore, be taken to represent views held by this class of educators. He would extend the period of compulsory attendance by one year, hence to the fifteenth instead of the fourteenth year, making the common-school period cover eight years. In this way he would have the three lower classes of the intermediate school merged with the folk school. He would take up one foreign language in this period and abolish the present final examination in the intermediate school. One year should be added to the gymnasium, admission to which should require an entrance examination. As an alteration of this scope would meet opposition in the Rigsdag, he believed a temporary regulation should be made, permitting the communities that so desired to put it into effect by extending the period of required attendance one year. In his opinion, the vital element is to avoid regulating the instruction with reference to the gymnasium, but to make it complete in itself, and not preparatory.

In March, 1917, the views held by the representatives of the modern (real) school were formulated by A. Christensen-Dalsgaard. He refers to a previous expression by the Modern School Association of Denmark, in which the members had unanimously agreed to work for changes in the common-school law, in accordance with the following general lines: 1. The instruction in the modern school should be concluded at the age of 16, with an examination in all branches meeting the requirements for entrance to the gymnasium. 2. A concluding division point in the instruction should be provided at approximately the fourteenth year. 3. The instruction concluded at the fourteenth year should be of an elementary character, with two languages and mathematics. 4. The association expressed the belief that a school reorganization to this extent could be made without materially affecting the modern school or detracting from its independence.

Outside of the teaching profession it is held—and most teachers are in accord with the proposition—that the folk school should be so ordered that it can, by continuation classes, impart instruction up to the sixteenth year without making it necessary for the pupil to leave home. It should be so conducted that the pupil does not become estranged from practical work, and unaccustomed to it, and so that

the expense does not become materially greater than at present. Regard should be had to social and economic arrangements, so that it does not cause vexatious innovations. The lengthened school period must not be extended to a point where schools and instruction become uninteresting and fatiguing, very common occurrences in the intermediate school.

Changes in accordance with these views are advocated by schoolmen in western Denmark. A superintendent from this part of the country, Karl S. Svanum, outlines a plan based on these principles, supporting his plan by details from schools where it has already been put into practice.

How the commission, appointed by the Department of Education to draft a revision of the existing law, has understood and embodied the present trend can be seen in the draft of a law prepared for the consideration of the Rigsdag. In its preliminary remarks the commission sums up the objections to the present law and states briefly what will be gained by adapting the proposed alterations. The law now in effect, the commission maintains, determines the articulation from above downwards, with the view of preserving the age of 18 as the year when the gymnasium course is to be completed, requiring the intermediate school as the preparatory, to conclude at 15. The immediate difficulty of these time limits is that they leave no point of conclusion at 14, the end of the compulsory period, but expect that the period would be advanced to 15 years, a change that at present does not seem likely. By concluding the intermediate school at 14, in accordance with the drafted plan, this difficulty will disappear. Another effect will be that the graduates from the intermediate school may continue either in the gymnasium or the modern school, the period covered by the latter being increased so as to comprise two years. The same change will also permit the pupils to continue together the first two years, when those who do not wish to go through the gymnasium may finish with a suitable examination, leaving the last two years for concentration on subjects best suited to the maturity of those who continue.

The drafted proposition thus defines each type of school and fixes the years it covers:

1. Proceeding from the instruction imparted by the folk school up to the years 10 or 11, advanced instruction is to be given, first in the intermediate school, then in the modern (real) school or the gymnasium.
2. The intermediate school comprises four one-year classes, imparting instruction of an advanced character and adapted to pupils of 10-14.

3. The modern school continues from the intermediate with two one-year classes of advanced instruction leading to a suitable examination.

4. The gymnasium continues from the intermediate school through four one-year classes with advanced instruction, adapted as a preparation for continued studies.

The instruction in the gymnasium divides along two chief lines according to the studies included in each and are to be known respectively as the *linguistic-historical* and the *mathematic-scientific*.

Besides fixing the course limits and interrelation among the types, the law as drawn up has in other paragraphs a number of provisions of vital importance in the system. The three classes of schools—intermediate, modern, and gymnasium—may be organized to give instruction separately to boys and girls, or they may be made coeducational. Where they are coeducational, certain phases of the work may be managed as separate for either sex.

Touching instruction in religion, pupils who do not belong to the State Church may, upon request from parents or guardians, be relieved from taking up the subject.

The commission points out that the proposed arrangement will be to the advantage of the common school in that its first three years will constitute a distinct unit covering the first stage, at the end of which a reclassification of the pupils and a change of teachers takes place. As this will leave the four upper classes of the folk school running parallel with those of the intermediate, it will be possible to group the subjects in such a way that the same plan can be followed by both schools. The plan will also lead to a simplification at a stage further along. The four-year gymnasium will comprise two halves, each a unit in itself. The parallelism of the first unit of two years with the modern school of the same period will make the two examinations coincide so that the status conferred by the one will be equivalent to that of the other.

As the revised plan reduces the lines of the gymnasium instruction by leaving out the classical line, and grouping its subjects under the linguistic-historical, the commission points out the advantages it believes will result therefrom. The omitted line had been followed mainly by students expecting to enter the ministry; but the scope of many gymnasia had not been comprehensive enough to include it, hence prospective theological students at these institutions had to submit to a special examination in the classical languages upon entering the university. Under the revised plan it will be possible to take up these subjects as a part of the linguistic-historical line where occasion demands without any rearrangement of the curriculum. Though the plan omits the classical line, it has in reality strengthened

the classical studies by giving these an increased number of hours in the two concluding years, the years of greatest maturity.

While the present discussion of the proposed plan has met with only such criticism as would be expected upon suggesting a departure from a long established order, it has in general been commended for the completion of school periods at points coinciding with other school requirements and customs, for bringing the subjects of the gymnasium into a more consistent grouping and for simplifying the articulation among the schools so that they give a more compact unity to the system.

HOLLAND.

The analogy which the school and school systems of Holland bear to those of other European countries is not close enough to preclude distinct national traits. These are not so obvious in the distinct types of schools and content of courses offered as in the national spirit and temperament which pervades and controls them. The school enactments that were adopted early as guides for subsequent development have proved to be a sufficiently safe basis for expansion to make unnecessary later enactments of a purely corrective character.

In the statutes regulating the schools of Holland can be traced an unwillingness on the part of the legislators to introduce radical innovations or to impose unnecessary restraints on either parents, teachers, or local authorities. Hence every movement that has eventually resulted in a radical departure from the established order or has given rise to a new type of school, such as the up-to-date technical and agricultural schools, originated in private initiative, gained local support, and expanded through State subventions, marking at every stage a steady methodical growth. The lawmakers have assumed that the people understood how intimately their interests were bound up with the efficiency of the schools and that the people would ungrudgingly bear the expense of their maintenance and growth, and also that local enterprise and intelligence could be counted on to aid in their management.

The disinclination to regulate where regulation can be dispensed with is seen in the attitude of the State toward the earliest training of the child. Whatever educational efforts should be made during infant years have been thought of as devolving entirely upon the parents both as a duty and as a prerogative, hence the State does not maintain infant schools nor institutions to provide them with teachers. The same objection against unnecessary lawmaking accounts for the State's reluctance and delay in passing a compulsory attendance law. Parents saw to it that their children attended the elementary schools

with regularity. In the attainments of her people in the rudiments of education, Holland has ranked favorably with the other European countries. In 1900 such a law was, however, passed, but with a majority of only one; it fixed the ages 6 to 12 as the period of obligatory attendance.

In matters of vital concern to children, particularly the care of the youngest pupils, Holland has been by no means slow in passing the necessary regulations. The strictest form of inspection has long been exercised in supervising the health and care of the young. Official reports from every district and school community have been required involving a fullness of detail touching the ventilation, heating, kind and position of school desks, lighting, cleanliness, the source and nature of the water, the playground and instruction in games. The regulations also covered the form of the earliest instruction, providing that this should not be based on books but should be given in connection with the handling of objects and with such recreation and activity as might be provided in the school garden.

In determining the amount and character of work a child ought to be permitted to do outside of school hours, the controlling authorities have evidently avoided attempting to cover it by a legal formula, but have left it in such shape that an adjustment may be made by inspectors on the merits of individual cases. To that end the local inspector may [art. 3] grant a temporary exemption from attendance at school for work in agriculture, gardening, tending cattle, etc., to children who in the last six months preceding the application, have regularly attended school, for not more than six weeks annually, not reckoning the vacations.¹

This article meets a condition common to all farming districts. At certain seasons of the year there is urgent need for the help that pupils of school age may be able to render with due regard to their years and health. If this demand is sufficiently general in a community, the school may, of course, be closed during the busy weeks, but, if this be done, there is the danger that some pupils thereby dismissed would have to waste their time in idleness. The application for excuse is left to an inspector after having heard the reasons, and specified regularity in attendance may be demanded as a prerequisite for granting it.

The law of 1900 and the later one of 1911 were found to be sound in principle, as proved by the embodiment of their main features in the law that superseded them in 1917, a child-protecting law prepared by the minister of education. This measure is not a substitution for these but rather a development of what was potentially inherent in them. The new enactment supplies a number of practical details and also extends its general application to urban as well as to rural life. In the first place, it distinguishes between wage-earning children employed by outsiders and one's own children employed at individual

¹ British Special Reports on Educational Subjects. Supplement to vol. 3, p. 7.

work, like chores. A child under 12 with the duty of attending school may not be employed on the farm; the municipal authorities may, however, permit children above 10 to perform certain kinds of work under specified conditions. Young persons under 16 are forbidden to do any farm work between 9 in the evening and 5 in the morning. This clause supersedes the one of 1911 which prohibited factory work by children between 13 and 17.

Holland's avoidance of measures imposing restraint and her firm insistence on essentials have proved to be sound principles in building up the system. To the teacher must be left a degree of latitude in selecting the studies of the curriculum, in apportioning the number of hours, and, most of all, in finding his own methods. The schedules made out by an official committee usually bear evidence of a desire to include as many subjects as possible with insufficient regard to what may reasonably be managed and assimilated within the time allotted, matters concerning which the teacher, who is responsible for the results, should have something to say.

In leaving the way open for individual and local initiative and encouraging its exercise in the interest of progress, Holland has not altogether escaped the difficulties that obstruct progress of this kind. It has not always been easy for her teachers to get out of the old grooves nor to take up more timely subjects instead of the old ones to which they had been accustomed. The most difficult point in choosing details of the study program was settled, fortunately as it appears, in 1889, when the law applying to instruction in religion was so framed that this subject was not excluded from the schools but its presentation regulated so that there could be no objection to it on sectarian grounds. Its inclusion was made optional out of regard for prevailing views; but if a teacher imparted the instruction in such a way as to interfere with the wishes of school patrons, he made himself liable to severe penalties. The act which placed the private church schools on a par with the State schools by extending to them the same amount—30 per cent of the total expense—as State subvention, has been regarded as a wise measure for a country almost equally divided between Protestants and Catholics. But one less fortunate trend has been the result of this enactment. Between the private schools and the State schools arose an unexpected distinction through which the latter came to be known as schools for the poor. They have, in consequence, suffered a decline so marked that in 1917 a request to the Netherland Teachers' Association insisted on an investigation of the support and the attitude of the municipalities to the two kinds of schools.

The teacher of Holland is prepared for his work by a four-year course in the training colleges. In one respect the entrance conditions differ here from those of similar institutions in other parts of

northern Europe, namely, in the requirement of a strict physical examination over and above everything else. In other countries, to be sure, examiners and school boards are aware of the importance of health and vigor, but they usually go no further than to require the candidate to be free from such physical defects as may be a handicap in the performance of his duties; but in Holland, educators hold that it is advantageous for the pupils to have before them in their years of plasticity a teacher who is himself developed as a strong and even physically attractive personality. Among the further prerequisites for a position, the close supervision of the practice teaching is worthy of note; during the entire course of this part of the teacher's preparation, he has the benefit of experienced help and advice. The number of hours that may be assigned to him as pupil teacher are, both for the sake of pupils under his charge and for his own sake, limited by carefully considered regulations.

The teachers are grouped in three categories as a basis for remuneration and promotion:

1. Those holding the position of head master with certificates qualifying for this position.
2. Those holding such certificates but with a position less advanced than the one for which they qualify.
3. A final class, namely, assistants.

In 1917 the Teachers' Association advocated the recognition of a fourth class, formed from the number of supply teachers appointed to fill positions left temporarily vacant. These teachers have been necessary, but they have also been a source of perplexity to the regularly employed instructors by requiring salaries equal to the latter. For this reason the association asks that they form a class as reserve teachers with regular salaries. Though the remuneration of all classes of teachers has been fair, even generous for normal times, the last few years have, here as elsewhere, created conditions that compelled teachers to insist on an increase commensurate with the advanced cost of living. Through their own organizations as well as through their representation in the lawmaking assembly they have been able to show the reasonableness of their request; but in many districts friction has come about with the farmers who furnish a part of the increased salary.

The interruption and dislocation of the school work by the conflict near her border have not diverted the attention of the teachers of Holland from the permanent issues of their work. Though the opportunity of the farm in responding to the call for foodstuffs drew a large part of the school population to rural localities for a while, there was no evidence that teachers tried to impress pupils with the advantage of either rural opportunities or urban opportunities. The value of studies leading to productiveness was by no

means underestimated. Yet the people of Holland were unwilling to surrender any part of their literary studies in favor of studies with greater claims to meeting this one demand of the times. Although the schools here have one more foreign language than have France, England, and Germany, there was no attempt to relieve the schedule by curtailing the time given to Latin and Greek. In the case of the Girls' Higher Burgher Schools, the control of which is left entirely with the municipal authorities with no State aid, local pressure might have been expected to eliminate the one year of Latin or Greek required for admission to the university. In view of the flexible schedule of these schools, the alteration could readily have been made, yet humanistic instead of productive values so prevailed that these subjects were retained.

Among war measures pertaining to thrift and practical helpfulness, the schools of Holland instead of starting many new courses devoted themselves to strengthening those that already existed. Clearly the choice between the occasional and the permanent was here the determining factor. In consequence the courses in domestic service and domestic life with all the subjects in hygiene, sanitation, and thrift thereto appertaining were strengthened so that they are now taught in a more systematic way up to the time the girls reach 16 with special departments of the same general courses after that age.

Even in this period of stress the teachers of Holland are taking time to improve outside facilities of educational value. This is seen in the efforts made to perfect the educational value of the Netherland School Museum at Amsterdam instituted by the Netherland Teachers Society.¹ This contains an important collection of books and periodicals relating to education in Holland and elsewhere, and of teaching appliances. Not only are current journals displayed on a reading table and past educational journals accessible, but an index has been prepared of the articles on education that have appeared during the past 40 years in Dutch journals of general scope.

In Holland the war has given an impetus to the study of English both independently and in connection with the schools. "Their neutrality has yielded the Hollanders a number of interned guests available as teachers or touchstones of progress." For the purpose of studying the English language and literature English clubs and study associations have been established at the university at Utrecht, also in Amsterdam and other places. To the same end a Dutch firm of publishers is issuing a select series of English literature classics.

Familiarity with the violence of war has had an unfortunate effect on the psychic life of school children not only in the belligerent countries but in neutral countries as well. The reports that are at

¹ The Journal of Education and School World. London, October, 1918.

hand from Germany, Norway, and Holland substantiate the conclusions that would be expected, namely, that details from the front have reached the young with a fascinating appeal, causing a disturbance in their sense of right and wrong. The abnormal conditions existing in certain parts of Holland, especially in the border zone, have furnished temptations to laxity and crime. Het Kind, dealing with this subject, finds that at Utrecht the number of legal actions against young persons under 18 was 176 in 1915, the following year year it was 266, and in 1917 it had increased to 324. The damage that in this way threatens the moral life of the children has roused school authorities in Holland as well as in other countries¹ to consider the most efficient ways of combating it.

Hardships due to the war touched Holland's schools and social system with full severity. Geographically she held the precarious position of lying across the path of traffic between the belligerent countries and the world's food resources. During the course of the war she was entirely dependent on imports conditioned on an exchange of exports, generally viewed with suspicion by the opposing nations. Within her own borders unscrupulous profiteers did not hesitate to sell available food stocks to foreign buyers to an extent that threatened depletion and famine. The high cost of everything necessitated an internal regulation of prices on a basis partly patriarchal and partly socialistic, yet with very little hope of satisfying either the trades people or the consumers. The way in which these perplexities were met shows characteristic balance and clear view of the full effects, so that even when the solution had to be made in an emergency its remote consequences were clearly kept in view.

It is difficult to conceive how the principles that have entered into the intellectual and social life of Holland through the medium of the schools could have been more severely tested than during the past four years and a half. If these principles have guided her to fortunate solutions of perplexing problems and steadied her in embarrassing courses, it is reasonable to see in them evidences of the work accomplished by her schools.

THE SCHOOLS OF FINLAND.

With native literary treasures and native culture embodied in her traditions, Finland had the prerequisites for an educational system with strong national characteristics. From the very first, however, educational progress was swayed by influences tending to divert it from its native trend.

¹ In Germany it is recommended by the Minister of Education, that at stated times a special hour be devoted to the discussion of discipline and order and that notions of revenge be abolished from all forms of school life. In Norway the school authorities have under consideration plans to divert the children's attention from scenes of violence to the magnificence of nature. In Sweden six specialists from the Department of Justice have been appointed to prepare a plan for consistently combating the increasing tendency toward crime among the young.

The foundation on which the present Finnish schools were first built was laid between the years 1860-1870, and fashioned according to the principles of Pestalozzi. Soon a parallel tendency of an opposite character appeared, namely, classical aims, which finally resulted in the founding of the gymnasium of the present day. From the very first, the two languages used in the schools, Finnish and Swedish, have each represented a different tendency in shaping the school system. Again, every stage in the progress has been marked by the political as well as the academic pressure of Russia, Germany, and Sweden.

As in other European countries, the immediate effect of the war was to lower the attendance in general and especially in the secondary schools and to make it difficult to maintain the schools on account of the shortage of teachers.

In the statistics brought down to the 1st day of February, 1915, the schools giving instruction of an elementary character or concerned with these are grouped separately, and include the folk school of the cities and the country districts, trade schools, household schools, continuation schools, training schools for teachers of the primary and elementary classes. They number altogether 4,634, of which 4,470 are the public elementary folk schools. The number of teachers employed was 6,345, and that of the pupils in attendance 198,038. Of the 3,250 schools characterized as higher folk schools 2,806 were Finnish, 433 Swedish, and 11 with both languages. The constantly growing number of schools has reduced the average distance of these from the pupil's home. During the year 1914-15 the number of pupils with less than 3 kilometers between school and home increased by 1,481; those living between 3 and 5 kilometers from the school increased by 285, while the number of those with more than 5 kilometers to go decreased by 319.

In 1915 Evangelical Lutheran congregations to the number of 467 conducted 454 primary schools. This marked, however, a decrease of 199 schools during the preceding five years, one obvious reason being the better facilities offered by the public schools. Another reason pointed out is that many industrial establishments in the communities have taken over arrangements for the first instruction of the children, to which the congregations have readily consented.

The very large number of congregation schools still maintained is due to the unusually advanced age (9 years) at which children enter the folk school. This made some form of preceding rudimentary instruction necessary. It was given at the homes and supervised by the clergy through annual inspection at parish meetings in the villages. The control was made effective by setting the ability to read and write as a condition of preparation for the confirmation rites.

The next stage in the preparation for entrance to the lycees comprises two and often three years in the folk school or an equivalent course of instruction in one of the numerous elementary schools. The lycees comprise eight classes of which the first five have developed so as to present finished courses leading to common occupations or to business and agricultural schools. This tendency has led to the creation of independent schools with five-year courses and equivalent in advancement to the communal middle or real schools of Sweden.

In the statistics the secondary schools ("learned schools") are treated with much fullness of details of which the following seem most significant:

In 1916 there were 19 State lycees, 24 private, and 7 communal, all using the Finnish language. At the same time there were 7 State lycees, 10 private, and 4 communal using the Swedish language; 28 middle schools used Finnish and 8 Swedish; 16 girls' schools used Finnish and 9 Swedish. Of other institutions of advanced rank, 12 used Finnish and 7 Swedish. Of this total of 150 secondary schools, then, 105 used Finnish and 45 Swedish.

The three upper classes of the lycees constitute the gymnasium proper with two groups of courses, the modern group and the classical group. In the latter Latin is obligatory, while a choice is left between Greek and French. Pupils who do not wish instruction in either can elect the modern course in mathematics with the addition of physics, chemistry, or drawing. In case they prefer the brief course in mathematics as offered in the classical group, they can elect this conditioned on taking the modern courses in physics, chemistry, and drawing.

The time and subject schedules now in effect are not at hand, but those that were followed before 1905 throw an interesting light on the system that then prevailed. In the classical gymnasium the apportionment was as follows: The vernacular—the medium of instruction which was either Finnish or Swedish—16 hours; German, 12; Latin, 36; French (elective), 6; Russian, 40. In the modern gymnasium the Finnish was raised to 18; German to 18, French was made required and given 12; English was admitted as an elective with 4, and Russian maintained the same as in the classical gymnasium at 40 hours. In 1908 Russian had been reduced to 20 hours.

The two normal colleges—one at Helsingfors and one at Jyväskylä—are maintained as classical institutions and particularly for the training of teachers for secondary schools. The qualifications for positions include the preliminary university examination for the degree of doctor of philosophy, the completion of two terms of a training college with the practice instruction appertaining thereto. Further, a specified period of service, participation in criticism and conferences, and, finally, a direct teaching test passed upon by a

supervisory committee of the faculty. The candidate is, moreover, required to pass an examination in education and didactics before the professors in these subjects.

Three distinct tendencies are very marked: (1) Up to the outbreak of the war the Finnish-speaking element, as evidenced by student statistics, had made steady headway. Before 1890 Swedish-speaking graduates were in the majority, but since this date the Finnish have come to predominate. (2) The growth of private institutions with consequently greater freedom and variety in teaching plans and cultural agencies. (3) Education for present-day practical demands as offered in the modern line of the lycee has gained ascendancy over the classical. This is most clearly seen in the private schools, but a similar influence also sways the State schools.

Finland was far in advance of other countries in providing for the higher education of women. The first public secondary school for girls was begun in 1788 under the name of *Demoisellen-Classe der Hauptschule zu Wiborg*. In 1804 the name was changed to *Töchter-schule*, and again, in 1842, to *Större Fruntimmerskolan*. In 1835 a school for young women between 9 and 18 years of age was started in Helsingfors; it was conducted in cooperation with a coeducational primary school for children in the age of 7-10. This institution enjoyed a rapid growth, maintaining a faculty of 13 men teachers and 2 women teachers besides special instructors in singing and calisthenics. This field of educational work became recognized to such an extent that in 1844 the State founded an institution for the advanced instruction of women. The school law of 1843 fixed the status of girls' secondary schools by coordinating them with the school system of the country and specifying the subjects of the curricula in those of Wiborg, Åbo, Helsingfors, and Fredrikhamn. The continual advance of this type of institutions has proceeded by increasing the number of classes of those already existing, by granting them State subventions and by founding new ones. At the present time there are 20 Finnish—or Swedish-speaking secondary schools for girls. In their educational work they were able early to overcome the prevailing prejudice against gymnastics for women, and brought it to such advancement that the instruction in this branch as conducted in Helsingfors became a pattern for neighboring countries. In other schools coeducation came to be extended from the primary classes to advanced secondary instruction until at the present day one-half of the total number of schools admit members of both sexes to the same educational privileges. In the spring semester of 1916 there were 866 women students in the University of Finland out of a total attendance of 3,478.

The People's High Schools conducted in accordance with the principles of those in Denmark have gained recognition in Finland. They are founded, owned, and maintained by local organizations, but receive no State grant for their support nor aid for students.

Facilities for higher education are furnished by the Technical High School of Helsingfors with four-year courses in the sciences theoretical and applied, and by the University of Finland. In 1916 the university had a faculty of 239 members and an attendance of 3,478. Many learned societies connected with the university conduct comprehensive activities in study and research.

The latest reports, under date of October, 1918, which have come to hand through Swedish sources, speak of far-reaching changes and reforms to be inaugurated in the school system of Finland. According to these the Senate has appointed experts to submit a proposition for the reorganization of the free public school activities and, with this in view, to draft a plan for a central board of control to be made up of representatives of every active school organization and school board. The central board is to perform its duties through an executive committee working under its direction. The contemplated activities to be carried out in this manner include the founding of libraries, organizing lecture courses, instruction courses, and training in the practical arts of the home. The Government, too, as it appears, is determined to pass a general compulsory attendance law such as had long been discussed. The cost of all changes is estimated at 8,000,000 marks. The expense of maintaining the folk schools is to be readjusted so that the communities will receive 60 per cent of the total from the State. The chief of school supervision has been requested by the Senate to present a detailed proposition for the complete reorganization of the school system, based on the principle of the folk school as the foundation. The new organization, it is expected, will in its fundamental lines be a six-year folk school, divided into a first period of two years and a second period of four years; a middle school of either three or four years and a three-year lycee, or a total length of 12 or 13 years. Proceeding from the middle school as preparatory, instruction would be given in professional schools, teachers' colleges, and lycees.

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EDUCATION IN ICELAND.

By HOLMFRIDUR ARMADOTTIR.

Iceland (or Island), which is the proper name, is an island lying in the northeast Atlantic Ocean touching the Arctic Circle with its northernmost points. Its area is about 40,000 square miles; its population consists of about 90,000 people direct descendants from the Norwegian Vikings mingled with Celtic blood.

It was discovered at the end of the ninth century, and settled in the last half of the ninth and first half of the tenth centuries. The settlers had left their country because of the loss of their freedom through political struggles. In the year 930 a commonwealth was

established in Iceland; in 1262 it was united to Norway, and later on it became subject to Denmark or, rather, to the United Kingdom of Denmark and Norway. Since 1814 Iceland has belonged to Denmark alone. On December 1, 1918, Iceland became a sovereign State, though in coordinate union with Denmark. The proclamation of her sovereignty was made on December 2, and celebrated with impressive ceremonies. The national flag of Iceland was raised at Reykjavik the capital, and saluted by a Danish man-of-war sent there for that purpose.

The language spoken and written in Iceland is almost identical with that spoken by the ancestors of the present population, the changes being so slight that the Icelandic youth of to-day can easily read and understand the first book written in it dating from the thirteenth century.

Shortly after the adoption of the Christian faith, in the year 1000, the Icelanders learned the Roman alphabet and substituted it for the ancient Runic, which they had hitherto used for engravings on stone and metal. Already in the twelfth century schools were founded at the two ecclesiastical sees, Volar and Skalholt, and at two other places. Young men went to France and Germany and other countries to study. When they returned they became bishops, ministers, or teachers of the schools. In the thirteenth and fourteenth centuries several monasteries were established, and, as in all other Christian countries, they became the centers of educational development. Some of the schools had the special aim of training young men for the ministry; others had the purpose of general education of the public. History tells us that they were attended by both sexes at all ages, the name of a learned woman who taught Latin in one of the schools being given. In this connection the famous old Icelandic literature deserves especial mention. The Sagas (legendary tales), the Eddas (Scandinavian myths), and other classic Icelandic literature were committed to writing in the twelfth and thirteenth centuries. Early in the sixteenth century the first Icelandic books were published, and the whole Bible was printed in 1583. All through the dark periods of plague, famine, and other disasters, the schools were kept open, and they seem to have been a vigorous source of life for the stricken people. As a link between them and the common people we find, at all times, prominent preachers, religious poets, and civil leaders shining out as stars from the darkness. For ages it was the duty of the clergy to have supervision of the homes.

At the age of 14 years, which was the period fixed by law for confirmation, the children were supposed to know the Lutheran Catechism by heart, and for that they had to learn to read, and many a man and woman became a skilled writer. It was the greatest pleas-

ure for the people in the rural sections to assemble in the main room at the farmhouse during the long, dark, winter evenings, working and studying. One read aloud from the Sagas, Eddas, Folklore, or whatever books they had at hand. while the rest were working with wool, knitting, spinning, carding, carving wood, or doing other kinds of domestic work. The evening ended with religious service, singing psalms, and praying. Gradually the towns grew and formal schools were established. The young people from the country were then sent to schools for the winter season; the working people went to towns or trading places to seek work. Home schools of this kind are therefore becoming more and more rare. About the year 1880 an act was passed by the Althing (Parliament) requiring that all children 14 years old should be trained in reading, writing, and arithmetic, and also be instructed in the catechism and Bible history. To comply with this law, schools and teachers became necessary, and, in time, both were provided. According to the law of 1907, the country is divided into 220 educational districts. In the five towns and in 48 districts, schools have been established, but 167 provide only itinerant instruction. For each of the school districts a school board of five members is elected, but for the itinerant districts a committee of three members. The cabinet appoints the superintendent of elementary education for the whole country. The school boards and committees of education have to provide adequate means of education and are responsible for the fulfillment of the law.

All children are bound to go to school six days a week, not less than six months a year, from 10 to 14 years of age in the school districts, but in the itinerant districts the children at the best and most central farmhouses must get at least a two-months' course each year. For the rest, their instruction depends entirely on the homes. If the parents or guardians wish to teach their children only at home, they may do so. From 10 to 14 the children are expected to go through one grade a year, with examinations. In May is held an examination for all children 14 years of age, whether they have been at school or not, conducted by a censor appointed by the Government or by the country superintendent. If a child has been neglected and not sent to school or taught the required subjects at home, the parents or guardians are fined. The parents or guardians are required to give their children the primary instruction in reading, writing, and numbers, either at home or with the assistance of a teacher. If they do not, the educational committee or the school board is authorized to have the children taught at the cost of the parents or guardians. In many of the elementary schools are grades for children under 10 years of age, but most of them require fees. All schools for children from 10 to 14 years are free. For that age a local contribution bears the entire cost of instruction

with additional support from the county treasury. In several places private schools have been established especially for primary teaching.

The subjects the law requires for examination of pupils at 14 years of age are: Icelandic (reading, grammar, composition, literature), writing, mathematics, religion (catechism, Bible history, psalms), geography, natural history, and Icelandic history. Furthermore, according to governmental decree many schools have added singing, general history, drawing, physical training, and needlework. A few schools give manual training and domestic science; but a great many give instruction in one or two foreign languages, preferably Danish and English. Most schools begin October 1 and close May 14. For that period attendance is compulsory six days a week. At the present time no normal person can be found in the whole country without the knowledge of reading, and hardly one who is not able to write and use numbers. Although there seems to be a great difference between the rural popular education and that of the towns and more thickly inhabited parts of the country, yet children brought up in the rural sections with only two months' instruction a year, have often proved themselves to have better capacities than those from the regular schools. In the country the children have to work the greater part of the year. Study is a luxury for them, to which they look forward. On the contrary, the town children look forward to being free from school and prefer to go into the country and help the farmers there in summer. The simple and healthy country life gives the children living there opportunity to study nature and life in its reality. Very often the young people do not go to high schools (*unglingaskolar*) till they are 17, 18, or 20 years old. From the time they leave the elementary school till they reach this age they perform manual labor.

The schools corresponding to the American high schools are 25 in number, most of them junior schools. A few of them are evening schools and partly technical. Many of them are connected with the elementary schools, having the same master and directed by the same school board. All these schools are equally for men and women. Two senior schools are for women only. In these are grades for domestic science, and three schools are for domestic science only. All these schools receive more or less aid from the national treasury; a few of them are private, but most of them have grants from local authorities. Professional schools are as follows: Nautical, 1; mechanical, 1; agricultural, 3; commercial, 1; normal, 1; obstetrical, 1. With the exception of the commercial these schools are all national and are supported by the Government. For the deaf and dumb there is one school. In the town is a "real" school (*gagnfriedaskoli*), established in 1880 and affiliated with the college in Reykjavik. It is a boarding school, as are several of the schools before mentioned. The

College in Reykjavik, (the capital of Iceland) is in reality a continuation of the Latin Skalholt school founded in Skalholt immediately after the middle of the eleventh century. It is now in two divisions, the "real" school or high school, and the college. The Icelandic name is: Hinn almenni menntaskoli. It is national as is the "real" school in Akureysi.

The University of Iceland was established by the law of July 30, 1909, and has been active from June 17, 1911. It has four faculties: Theology, philosophy, medicine, and law. Before its foundation there were a school of medicine and a theological seminary in Reykjavik; for all other higher teaching the students had to go abroad. A student from Iceland had great privileges at the University of Copenhagen. Most of them studied there and are still doing so, especially in those subjects not offered at the University of Iceland. Besides the Icelandic faculty, there have been French, German, and Danish professors at the university, sent by the governments of these countries, but when the war broke out the French and German had to retire. Popular lectures were given at the university in philosophy, literature, and history; statistics as to the number of attendants on these, however, are not available. In the normal school is a course for teachers in the spring season, where they not only receive free tuition, but are also allowed their traveling expenses and support. Many teachers go to the Teachers' College in Copenhagen for their further education, and others now go to America. Men and women have equal right to attend all the educational institutions and to fill public offices as well.

Many of the high schools, likewise those for the professions, are free. Schools for advanced education are all free and even give a little support to the poorer pupils.

Since the war began education in Iceland has been at a standstill; indeed, retrogression has been seen in some places. In spite of the fact that the island is so far away from the great disaster, it has been seriously affected. Fuel has been so scarce and the prices of all necessities so exorbitant that both the school year and the daily hours have been greatly reduced in most schools, and a few have been closed altogether. In common with the rest of the civilized world, Iceland earnestly hopes for better times.



DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 30

THE AMERICAN SPIRIT IN EDUCATION

By C. R. MANN

CHAIRMAN ADVISORY BOARD OF THE COMMITTEE ON EDUCATION
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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., March 28, 1919.

SIR: America inherited most of the content, form, and spirit of the education of its schools from Europe; but from Colonial times until now there has been an ever-increasing tendency to adapt these more closely to the needs of life in America and to the American spirit of service. This tendency has been given unusual impetus by the exigencies of war through which we have just passed and of readjustment through which we are now passing. The present and the immediate future therefore seem to offer an opportunity, which should not be neglected, to unify the life and work and education of America more completely and more vitally than has ever before been possible. The results of a study of the American spirit in education, embodied in the inclosed manuscript by Dr. C. R. Mann, of the advisory committee of the Committee on Education and Special Training of the Department of War, will, I believe, be helpful to this end. I therefore recommend that it be published as a bulletin of the Bureau of Education.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

THE SECRETARY OF THE INTERIOR.

THE AMERICAN SPIRIT IN EDUCATION.

Chapter I.

BENJAMIN FRANKLIN, THE PROPHET OF AMERICAN EDUCATION.

The sources of Benjamin Franklin's power and achievement must be traced to influences other than schooling, for he spent less than two years in the schools of Boston. His ancestors were sturdy and ingenious artisans, essentially practical in their whole view of life, and active in the literary and political affairs of their little village of Ecton, in Northamptonshire; yet keenly interested in the religious issues of their day. In short, these forbears were of the class who take the ideal world for granted and proceed in the faith of it to a conquest of the real.

Franklin's early "readiness in learning to read" together with the opinions of friends that he "would certainly make a good scholar," led his father to believe that he might be suited for the ministry. His uncle Benjamin encouraged this 8-year old lad in this idea by presenting him with several volumes of shorthand notes of sermons "as a stock to set up with." Fortunately, the family income would not permit of the expense of a training for the ministry, considering the "mean living many so educated were afterwards able to obtain," and Benjamin therefore became at the age of 10 assistant to his father in the eminently practical, if less aristocratic, trade of tallow chandler and soap boiler.

Benjamin hated this work. His father, fearing lest this great dislike for the trade might lead Benjamin to run away to sea, as his brother Josiah had done, carefully studied the boy in order to discover a trade more to his liking on land. Together they watched workmen at their work, and thus there developed in Benjamin that admiration for clever and skillful handling of tools from which he acquired the knack "to do little jobs" himself. This knack proved invaluable later when he wished to "construct little machines for his experiments while the intention of making the experiment was fresh and warm in his mind." But these trades of "joiner, bricklayer, turner, brazier, etc.," failed to stir his imagination.

"His bookish inclination" finally determined his father to make him a printer.

The father's influence was exerted not only in the selection of a trade, but in other ways as well. His concern was to create for the children a home atmosphere, which might "turn their attention to what was good, just, and prudent in the conduct of life." There was music for them in the evening, "when he played psalm tunes on his violin"; often a "sensible friend or neighbor" was invited in for meals "when some ingenious or useful topic that might tend to improve their minds" was discussed before the children. When discipline was needed he did not always resort to chastisement, but by argument convinced the boy "that nothing was useful that was not honest."

A fondness for reading developed in Benjamin at a very early age. He does not remember "when he could not read." While he was still a printer's apprentice he devoted all his spare time, especially on Sundays, to reading, and "often sat up in his room reading the greatest part of the night, when the book was borrowed in the evening and to be returned early in the morning, lest it should be missed or wanting."

The books that most impressed his youthful mind were Pilgrim's Progress, Burton's Historical Collections, Plutarch's Lives, Mather's Essays to do Good, and De Foe's Essay on Projects. The Essays to do Good discuss such topics as the occasion for doing good, the excellence of well doing, internal piety and self-examination, the duties of schoolmasters, and a society for the reformation of manners; while the highly imaginative Essay on Projects proposes reforms for the benefit of mankind in banking, insurance, pensions, highways, charities, learned societies, and the education of women.

The effects of this reading on Franklin's youthful spirit are reflected in his earliest writings, which, at the age of 16, under the assumed character of a middle-aged widow, named Silence Dogood, he contributed to his brother's newspaper. In one of these he gives expression to his boyish sentiments concerning college students and "Academical Learning" in the form of a quaint allegory which he interprets as "a lively Representation of Harvard College, etcetera." In others he discusses in a witty and satirical style the barbarous custom of denying the advantages of learning to women, the lack of poetry in New England, with a receipt to make a New England funeral elegy, the question whether a Commonwealth suffers more by hypocritical pretenders to religion or by the openly profane, and the establishment of friendly societies and pensions to ameliorate the lamentable condition of widows.

Mingled with the humor of these playful effusions runs a serious interest in the business of life—a conviction that "it is undoubtedly

the Duty of all Persons to serve the country they live in," and a resolution on his own part "to do for the future all that lies in my way for the service of my Countrymen." Thus even his earliest essays show that sense of humor and that imaginative idealism which seeks to express itself in actions useful to mankind.

These Dogood papers may well serve as models of clear and forceful English—yet they are the work of a lad of 16 who had had practically no ordinary schooling. But Franklin would not have us believe that his was a rare talent beyond the attainment of others. He tells us how his father found some of his papers and how—

he took occasion to talk to me about the manner of my writing; observed that * * *. I fell far short in elegance of expression, in method, and in perspicuity, of which he convinced me by several instances. I saw the justice of his remarks, and thence grew more attentive to the manner in writing and determined to endeavor at improvement. .

Further incentive came to him from the tales overheard in his brother's printing office at the approbation given certain ingenious contributors to the *New England Courant*. He, too, "was excited to try his hand among them" and wrote an anonymous paper, which was tucked under the door of the printing house. It was read in the morning and he had "the exquisite pleasure of finding it met with approbation."

Thus, after he had been led by his father to recognize his shortcomings and had himself come to see that an effective style of writing was eminently worth while, he inaugurated that well-known series of experiments and exercises by which he sought to improve his English through contact with the best that has been taught and said in the world. Hence his power of expression was not a gift of the gods, which sprang full-grown from the brain of a genius, but was the result of self-imposed discipline for the satisfaction of a personal need.

Though most of his spare time was devoted to books, Franklin was no recluse. He formed close friendships with "bookish lads" and frequently tried his powers of argument with them in debate. At first he was "overbearing and rather insolent" and given to positive and dogmatic statements, a turn of mind which he "had caught by reading his father's books of dispute about religion." But a Quaker friend objected to this, and having "convinced me by mentioning several instances, I determined to cure myself of this folly." The reading of Xenophon's *Memorable Things of Socrates* suggested the idea of substituting for this habit of "abrupt contradiction and positive argumentation," the modest diffidence of "a humble inquirer and doubter." He found this habit very effective in dealing with men, and therefore "took a delight in it, practiced it continually" and thus acquired that power of stirring the imagination and "per-

suading men into measures that I have been from time to time engaged in promoting."

Notwithstanding his aversion to religious disputes and although the "dogmas of the Presbyterians . . . appeared to him unintelligible, and he early absented himself from the assemblies of the sect," Franklin was much impressed in his boyhood by the work of the benefit societies which Cotton Mather had established in Massachusetts. These societies met for the discussion, not of disputed doctrines, but of such questions as—

Is there any remarkable disorder in the place that requires our endeavor for the suppression of it; and in what fair, likely way may we endeavor it? Does there appear any instance of oppression or fraudulence in the dealings of any sort of people that may call for our essays to get it rectified? Is there any matter to be humbly moved into the legislative power to be enacted into a law for public benefit?

The effect on Franklin of these discussions of the moral obligations of citizens in the practical affairs of life appears in the organization of the Junto in 1727. This club had no constitution defining its purpose and the duties of its officers. Instead there was a series of queries which each member was expected to read daily and to consider carefully, in order to be ready for discussion at the next meeting. The following are typical:

Have you read over these queries this morning in order to consider what you might have to offer the Junto touching any one of them? *Viz*:

Have you met with anything in the author you last read, remarkable or suitable to be communicated to the Junto, particularly in History, morality, poetry, phisic, travels, mechanic arts, or other parts of knowledge?

Have you lately heard of any citizens thriving well, and by what means?

What happy effects of temperance, of prudence, of moderation, or any other virtue have you lately observed or heard?

Have you, or any of your acquaintance, been lately sick or wounded? If so, what remedies were used, and what were their effects?

Do you think of anything at present in which the Junto may be serviceable to mankind, to their country, to their friends, or to themselves?

Have you lately observed any defect in the laws of your country, of which it would be proper to move the legislature for an amendment? or do you know of any beneficial law that is wanting?

Have you lately observed any encroachment on the just liberties of the people?

These general queries were designed to stimulate the members to formulate specific topics for discussion, since—

the rules required that every member, in his turn, should produce one or more queries on any point of morals, politics, or natural philosophy, to be discussed by the company, and once in three months produce and read an essay of his own writing, on any subject he pleased. Our debates were to be conducted in the sincere spirit of inquiry after truth, without fondness for dispute, or desire of victory.

So great was the vitality of this organization that it continued its activity for more than 40 years and—

was the best school of philosophy, morality, and politics that then existed in the province; for our queries, which were read the week preceding their discussion, put us upon reading with attention upon the several subjects, that we might speak more to the purpose; and here, too, we acquired better habits of conversation, everything being studied in our rules which might prevent our disgusting each other.

In the preparation of their papers for the Junto, the boys had great difficulty in securing books. At Franklin's suggestion they "clubbed their books to a common library" so that each might have the benefits of all. From this it was but a short step to his "first project of a public nature, that for a subscription library." This "mother of all the North American subscription libraries" spread its influence in the colonies and was the means of making "the common tradesmen and farmers as intelligent as most gentlemen in other countries, and perhaps contributed in some degree to the stand so generally made throughout the colonies in defence of their privileges."

The uses of the Junto were not confined to the amusement and education of its members. It was the parent of a number of similar organizations and furnished a center from which new plans for public welfare could be initiated and disseminated. Backed by the newspaper which Franklin edited, it was instrumental in carrying into effect such useful projects as the organization of police and fire departments, of militia, of a hospital, of an academy for the education of the youth of Pennsylvania, and of a system of cleaning and paving the streets. To such an extent did Franklin become the mentor of public progress in Philadelphia that "there was no such thing as carrying a public spirited project through, without my being concerned in it."

Franklin devoted only his spare time to these enterprises for the public welfare; but this wise use of his overtime resulted in public benefit and also strengthened and built up his own business which was that of a printer. In this capacity he published a newspaper which contained real news, and discussed morality and other matters of public interest. He made the paper pay by means of his original system of business advertisements. His Almanack, for 25 years the most widely read publication in America, was filled with "proverbial sentences, chiefly such as inculcated industry and frugality as a means of procuring wealth and thereby securing virtue." "I endeavored to make it both entertaining and useful, and it accordingly came to be in such demand that I reaped considerable profit from it."

In 1737 Franklin was appointed deputy postmaster of Philadelphia, a position which he found "to be of great advantage; for,

though the salary was small, it facilitated the correspondence that improved my newspaper, increased the number demanded as well as the advertisements to be inserted, so that it came to afford me a considerable income." Later, as Postmaster General of the Colonies, he reformed the whole postal service of the country, so that for the first time it yielded a revenue to the Crown. In time he was displaced by a "freak of the ministers" and "since that imprudent transaction they have received from it—not one farthing!"

Not only was Franklin a very practical business man, but he successfully advertised the reasons for business success through the sayings of Poor Richard: "Honesty is the best Policy; Drive thy Business, let not that drive Thee; Many Words will not fill a Bushel; a small Leak will sink a great Ship; he that lives upon Hope will die fasting; a Ploughman on his Legs is higher than a Gentleman on his Knees." Many of these "gleanings from the Sense of All Ages and Nations" were published in 1757 in a pamphlet called "The Way to Wealth" which Franklin modestly says "some thought had its share of influence in producing that growing plenty of money which was observable for several years after its publication."

The influence of Franklin on the economics of the country did not end in Poor Richard's injunctions to the people. In 1729 he published a "Modest Inquiry into the Nature and Necessity of a Paper Currency" in which he concludes that "the riches of a country are to be valued by the quantity of labor its inhabitants are able to purchase." This idea that labor is the measure and the creator of wealth was elaborated 46 years later by Adam Smith in the *Wealth of Nations*.

The autobiography makes little mention either of Franklin's scientific work or of his extensive correspondence on questions of electricity, meteorology, and medicine. These seem to have been to him merely amusements with which to beguile the time not devoted to his trade or to his labors in the service of his fellow men. Yet his experiment with the kite is perhaps the finest example of that imagination and fearless faith which are the motive power of science. His experiments won him recognition as a leader among his scientific contemporaries and his theory of electricity is prominent to-day in the discussions that have sprung from the recent discoveries in physics. The American Philosophical Society, which he established in 1744 for the purpose of making a cooperative attack on the scientific problems that perplexed him, is still in a flourishing condition.

It was fortunate for the colonies that they had a man like Franklin to represent them at the court of France during the American Revolution. His integrity, courage, and resourcefulness; his common-sense judgment, and scientific attitude of mind; his humor, love of

service and deep understanding of men; and his practical business sense all combined to make him win the adoration of the French people. He became to them a personification of the American spirit of liberty, equality, and fraternity.

Early in life Franklin "conceived the bold and arduous project of arriving at moral perfection." To attain this end he inaugurated a definite campaign for the acquisition of the 13 virtues that "occurred to me as necessary or desirable." But the scheme could not for long be confined in its operation to Franklin alone and accordingly he purposed writing "the Art of Virtue," not a "mere exhortation to be good, that does not instruct and indicate the means" but designed to show "the means and manner of obtaining virtue." The plan never was realized, as the "project required the whole man to execute, and an unforeseen succession of employs prevented my attending to it." "But though I never arrived at the perfection I had been so anxious at attaining, yet I was by the endeavor a better and a happier man than I otherwise should have been."

His religion was broadly human, embracing the good in all sects. He was intolerant of the discourses of the minister whose aim seemed to be "rather to make us Presbyterians than good citizens." To him the day's work was the basis of religion, the workshop the temple of God, and—

God Himself a Mechanic, the greatest in the Universe; and He is respected and admired more for the Variety, Ingenuity and Utility of His Handyworks, than for the Antiquity of His Family. . . . The Scriptures assure me that at the last day we shall not be examined what we thought, but what we did; and our recommendation will not be that we said, "Lord, Lórd!" but that we did good to our fellow creatures.

Franklin's idea on education are expressed in his two papers that deal with the English Academy in Philadelphia. In the first of these, published in 1749, he advocates the establishment of a school in which the chief subjects of instruction shall be English, arithmetic, geometry, astronomy, and history—"those things that are likely to be most useful and most ornamental; regard being had to the several professions for which they are intended."

These subjects should not, however, be treated in the ordinary didactic manner; for—

If History is made a constant part of their reading, may not almost all kinds of useful knowledge be that way introduced to advantage, and with pleasure to the students. As Geography, by reading with maps, and being required to point out the places where the greatest actions were done. Ancient Customs, religious and civil, being frequently mentioned in history will give occasion for explaining them. Morality, by making continual observation on the causes of the rise and fall of any man's character, fortune and power mentioned in history. Indeed, the general natural tendency of reading good history must be to fix in the minds of the youth deep impresssions of the beauty and usefulness of virtue of all kinds, public spirit and fortitude.

The history of commerce, of the invention of arts, rise of manufacture, progress of trade, change of its seats, with the reasons and causes, may also be made entertaining to youth, and will be useful to all. And this, with the accounts of the prodigious force and effect of engines and machines used in war will naturally introduce a desire to be instructed in mechanics, and to be informed of the principles of that art by which weak men perform such wonders, labor is saved, and manufactures expedited.

The idea of what is true merit should also be often presented to youth, explained and impressed on their minds, as consisting in an inclination, joined with an ability, to serve mankind, one's country, friends, and family; which ability is, with the blessing of God, to be acquired or greatly increased by true learning; and should, indeed, be the great aim and end of all learning.

That this plan of Franklin's was far ahead of its time is evidenced by the opposition which it aroused. In his second paper on the Academy in 1789 he tells us that "the Latinists were combined to decry the English school as useless. It was without example, they said, as indeed they still say, that a school for teaching the vulgar tongue, and the sciences in that tongue, was ever joined with a college." As a result of this "unaccountable prejudice in favor of ancient customs," Franklin concludes that "wishing as much good to the Latinists as their system can honestly procure for them, we now demand a separation" in order "to execute the plan they have so long defeated, and afford the public the means of a complete English Education."

The subsequent sections of this little book indicate how completely Franklin's own development and his writings portray the kind of education required to satisfy the national intuitions and instincts. He may justly be regarded as the prophet of American education and deserves a leading place among American educators. The wonder is that a century and a half elapsed after his lucid exposition of the subject before the country at large could rid itself of its ancient traditions and give unquestioned moral support and social sanction to his sane and sensible precepts and conclusions.

Chapter II.

THE APPRENTICE DAYS.

Public responsibility for industrial education was first publicly recognized in the poor laws of the Elizabethan age. During the reign of Queen Elizabeth about half the population of England were vagabonds. After repeated attempts to suppress vagabondage by force had failed, Parliament, in 1553, authorized the overseers of the poor to call for voluntary contributions from the rich for the purpose of placing the children of the poor in apprenticeships where they might learn a trade and thus become self-supporting. Evidently, the charitable contributions of the rich were not adequate to the requirements, for the legislation was gradually made more compelling until, in 1601, it was voted to raise the required funds by compulsory assessments of all ratable persons.

This idea of taxation for the purpose of training poor children so that they might become economically productive is expressed in several of the earliest education acts in the various colonies. Even before turning their attention to schools, the General Court of Massachusetts (1640) directed the magistrates to further the growing of flax and to consider "what course may be taken for teaching the boys and girls in all townes the spinning of yarn." In 1642, the same court, impressed by "the great neglect of many parents and masters in training up their children in learning and labor, and other employments which may be profitable to the commonwealth," ordered and decreed that in every town "the chosen men appointed for managing the prudential affairs of the same shall have the power to take account from time to time of all parents and masters, and of their children, concerning their calling and employment of their children, especially of their ability to read and understand the principles of religion and the capital laws of this country; and they shall have power to put forth as apprentices the children of such as they shall (find) not to be able and fit to employ and bring them up. They are to take care of such as are set to keep cattle be set to some other employment withal, as spinning upon the rock, knitting, weaving tape, etc. They are also to provide that a sufficient quantity of materials, as hemp, flax, etc., may be raised in their several townes, and tools and implements provided for working out the same."

The act of 1647 completes the legal foundation of the public schools of Massachusetts.

It being one chiefe project of that ould deluder Satan to keepe men from the knowledge of the Scriptures [and] that learning may not be buried in the grave of our fathers in the church and commonwealth . . . It is therefore ordered, that every towneship in this jurisdiction, after the Lord hath increased them to the number of 50 householder, shall then forthwith appoint one within their towne to teach all such children as shall resort to him to write and reade, whose wages shall be paid either by the parents or masters of such children, or by the inhabitants in general by way of supply, as the major part of those that order the prudentials of the towne shall appoint; . . . and it is further ordered, that where any towne shall increase to the number of 100 families or householder, they shall set up a grammer schoole, the master thereof being able to instruct youth so farr as they may be fited for the university.

The case of Massachusetts is typical of the general attitude throughout the colonies. In Virginia and Pennsylvania this same conviction that public education should include training for a gainful occupation finds expression in the early legislation. Thus in Virginia the act of 1660 says:

To avoid sloth and idleness . . . as also for the relief of parents whose poverty extends not to giving (their children) breeding . . . the justices of the peace should . . . bind out children to tradesmen or husbandmen to be brought up in some good and lawful calling.

In Pennsylvania, 1683, the provincial assembly provided—

that all persons in this province and territories thereof having children, and all guardians and trustees of orphans, shall cause such to be instructed in reading and writing so that they may be able to read the Scriptures and to write by the time they attain to 12 years of age, and that they be taught some useful trade or skill.

While this legislation was designed primarily to better the condition of the poor that they might not be a burden on the community, it helped to foster that sense of social distinction which has caused many to ignore the educational value of the practical arts and to overrate the educational value of the humanities. The real dignity, value, and educational importance of the practical arts were clearly seen by the prophets of America. William Penn, in 1693, wrote:

The World . . . ought to be the Subject of the Education of our Youth, who, at Twenty, when they should be fit for Business, know little or nothing of it. We are in Pain to make them Scholars but not Men! To talk, rather than to know, which is true Canting; . . . to know Grammar and Rhetorick, and a strange Tongue or two, that it is ten to one may never be useful to them; Leaving their natural Genius to Mechanical and Physical, or natural Knowledge uncultivated and neglected; which would be of exceeding Use and Pleasure to them through the whole course of their life.

From these facts it appears that in the minds of the founders of the public schools the expenditure of public funds for education was

justified not because it produced a "general diffusion of wisdom, knowledge, and virtue among the people," but because it was intended to secure four concrete ends of great value to the "Church and the Commonwealth." These were, for the church, that every one must (1) learn to read the Scriptures and the catechism; and (2) have the free opportunity of entering the ministry through the grammar school and the college; for the Commonwealth, that every citizen should learn, (3) the capital laws of the colony; and (4) some gainful occupation.

At the time that this legislation was enacted the only occupations open to graduates of the college were those of minister, teacher, and gentleman. The great majority of the people, including physicians and lawyers, learned their trades by the apprenticeship system. Therefore the responsibility for their education was divided between the schoolmaster and the master of apprentices. The schoolmaster was "to teach all such children as may resort to him to write and reade;" and be "able to instruct youth so farr as they may be fited for the university." The master of apprentices was to train them "in some honest lawful calling, labour or employment, either in husbandry or some other trade profitable for themselves and the Commonwealth."

This division of the functions of education between the schoolmasters and the masters of apprentices was inevitable under the social and industrial conditions which prevailed in the colonies. In time, however, schools came to be regarded as constituting the whole educational system, and the fact that the training of everyone to some "gainful occupation" is one of the important justifications of taxation for public education was forgotten.

The records of the Court of Massachusetts show that great difficulty was experienced in enforcing the legislation with regard to grammar schools. Though the fine for noncompliance was increased from £5 in 1647 to £40 per year in 1718, many towns preferred to pay the fine rather than maintain such a school.

In the meantime, industry continued to flourish. The American weavers of woolen cloth had become by 1690 such successful rivals of the British weavers that Parliament in 1699 passed the woolen act which forbade the colonists from transporting woolen goods from one place to another for the purpose of sale.

In 1718 a great stir was created in the town [Boston] by the arrival of a number of Irish spinners and weavers, bringing the implements of their craft. Directly the spinning craze took possession of the town and the women, young and old, high and low, rich and poor, flocked into the spinning school which was set up on the common in the open air. Prizes were offered for the best work and the enthusiasts went about proudly clothed in the homespun products of their own hands.

The first tannery was erected at Lynn in 1629 and in 1640 the General Court of Massachusetts appointed leather searchers in every town to see to it that "such hides and skins as by casualty or slaughter come to hand" were sent to the tannery. By 1650 Massachusetts was manufacturing shoes for the other colonies.

A smelting furnace was built at Lynn in 1643 by John Winthrop. Here important improvements in the manufacture of scythes and sawmill machinery were made. The General Court of Massachusetts granted Winthrop 3,000 acres to encourage his enterprise. In Connecticut all persons engaged in iron works were exempted from taxation. In 1719 the Maryland Assembly offered 100 acres of land to any citizen who would set up iron furnaces and forges in the Province. These industries developed so well that in 1750 Parliament ordered that "no mill or other engine for slitting or rolling of iron, no plating forge to work with a tilthammer and no furnace for making steel" should be erected "in any of His Majesty's Colonies in America."

These efforts on the part of Parliament to exterminate American industries in the interests of British manufacturers deterred but they could not check the growing interest of the colonists in useful arts. A special town meeting was held in Boston at the town house September 28, 1720, at which it was voted "that the Town will proceed to the choyce of a committee to consider about promoting of a Spinning School or schools for the instruction of the children of this town in Spinning." This committee recommended the erection of a suitable house and the employment of a weaver "having a wife that can instruct children in spinning flax, to take care of the school." This project was revived in 1751 when there was organized in Boston a Society for Encouraging Industry and the Employment of the Poor. Its avowed purpose was to foster the growing of flax and the manufacture of linen to be used for export to pay for imports of woollen goods. In 1755 the General Court of Massachusetts ordered—

that a tax be levied on every Couch, Chariot, Chaise, Calash, and Chair within the Province to be paid by the owner thereof annually, except the Governor, Lieutenant Governor, the President of Harvard College and the settled ministers throughout the Province, and that the money so raised should be applied to the purchasing a suitable house, within the town of Boston, for carrying on the business of spinning, weaving, and other parts of linen manufacture.

Fifteen hundred pounds were raised by this means and a manufactory house was built on Long Acre Street (now Tremont Street) where linens were produced and instruction given in spinning and weaving.

In New York a Society for the Promotion of Arts, Agriculture, and Economy was established (1764) for the purpose of—

encouraging to the utmost the manufacture of linen, which it is hoped to establish on a most solid foundation and thereby to increase the value of land, give employment to the poor, and save the public large sums of money and heavy debts for English goods.

The Stamp Act (1763) and the War of the Revolution gave impetus to the movement for goods "made in America." The Daughters of Liberty resolved to buy no more British goods and to wear only homespun; and the seniors in Harvard College agreed to take their degrees (1768) "dressed altogether in the manufactures of this country."

It is a well-recognized fact that the efforts of the British to crush American manufacturing industries were among the chief causes of the Revolutionary War. The only positive action of the first Continental Congress (1774) was its nonimportation agreement which they well knew would strike the British in a vital spot. This agreement was enforced with such fidelity that clothing, gunpowder, iron ware, and other necessities soon became scarce. Thereupon, Congress, in 1776—

Resolved, That it be recommended to the said Assemblies, Conventions, and Councils or Committees of Safety, that they take the earliest measures for erecting and establishing in each and every Colony, a Society for the improvement of Agriculture, Arts, Manufactures, and Commerce, and to maintain a Correspondence between such Societies that the rich and numerous natural advantages of this country for supporting its inhabitants, may not be neglected.

After the Peace of Paris, under the Confederation, each colony controlled its own trade. Because there was thus no concerted action with regard to industrial protection, England was able to flood the American markets with foreign goods which were sold at prices with which home manufactures could not compete. American industry was paralyzed, money became scarce, and the workingmen were idle.

To meet this situation, many societies were organized by voluntary action of "patriotic citizens for the promotion of the useful arts." Thus in Philadelphia the Society for the Promotion of Agriculture was founded in 1785. That same year a similar society was incorporated in South Carolina for the purpose of maintaining an experimental farm. The Society of Mechanics and Tradesmen in New York, though organized at this time mainly as a mutual benefit society, became prominent later because of its library and its school, which are still rendering valuable service. The Tammany Society, "a goodly company of consociate brethren, well skilled in the mechanic arts," was chartered in 1789 and was primarily intended to

foster industrial interests in opposition to the military order of Cincinnatus.

The leaders in these associations were men like Robert Livingston, American ambassador to France; DeWitt Clinton, governor of New York; Samuel DeWitt, surveyor general of New York; and Stephen van Rensselaer. Two college professors were also members of the New York Society. The subjects discussed at their meetings covered a wide range, e. g., methods of fertilization, experiments in growing corn, a proposed system of national standards of weights and measures, etc.

In 1787, the Boston Association of Mechanics and Tradesmen, in a patriotic effort to protect and develop home industries, sent a circular letter to other similar associations urging cooperation. These associations took an active part in the struggle for the ratification of the Constitution. "But for the firm belief and ardent hope that the Federal Constitution would protect and encourage the manufactures of the United States, it would never have been adopted." In this they were not disappointed, for the first act of the consolidated government (1789) was a statute for the joint purposes of "raising revenue and protecting manufactures by laying duties on goods, wares, and merchandise imported." The first Federal patent law was passed in 1790.

The ratification of the Constitution, the funding of the national debt, and the establishment of a national banking system furnished a safe basis for industrial development. These fiscal measures also supplied a powerful economic motive for the maintenance of national unity.

Hamilton's Report on Manufactures (1791) urged that a Federal Board for Promoting Arts, Agriculture, Manufactures and Commerce be created to encourage by rewards and lucrative premiums, the introduction of useful discoveries, inventions and improvements and to pay the expenses of immigration of artists and manufacturers in important branches of industry. The Federal board was never appointed, but the report had an immediate effect. In 1791, the Philadelphia Society for the Promotion of Agriculture offered prizes for the best farm products. A bill was introduced into the legislature of Pennsylvania (1798) levying a public tax of \$50 for each member of the legislature, the money thus collected to be offered as rewards for "such articles of Agricultural Production or improvements in Manufactures, or the useful Arts . . . as they shall think will be beneficial to the country." The bill was not passed until 1820. The legislature of New York State began lending money to individuals to enable them to establish and carry on manufactures, and in 1808 passed an act granting premiums for the best specimens of woolen cloth manufactured in the State.

President Washington added his voice to the encouragement of the movement, at least as far as agriculture was concerned, in his final message to Congress, December 7, 1796.

Institutions for promoting it (agriculture) grow up, supported by the public purse; and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end, none have been attended with greater success than the establishment of Boards, composed of proper characters, charged with collecting and diffusing information and enabled by premiums and small pecuniary aids to assist a spirit of discovery and improvement. This species of establishment contributes doubly to the increase of improvement, by stimulating to enterprise and experiment, and by drawing to a common center the results everywhere of individual skill and observation and spreading them thence over the whole nation. Experience accordingly has shown that they are very cheap instruments of immense national benefits.

The committee to whom this suggestion of "the farmer of Mount Vernon" was referred, reported on January 11, 1797, that the best way to promote agriculture was to excite among the farmers a spirit of enquiry, industry and experiment; and that this could best be done by establishing societies for the promotion of agriculture and internal improvements; because such societies supplied the farmers with the easiest means of acquiring needed information and compelled them to get acquainted with one another. A bill was reported which proposed the establishment at Washington of a National Agricultural Society. Thirty delegates elected by the society should constitute a National Board of Agriculture with a permanent secretary and free postage for its mail. The bill was referred to the committee of the whole and forgotten.

From the foregoing it appears that the eighteenth century was characterized by a gradual development of industrial production accompanied by a widespread discussion of ways and means of enlightening workers and encouraging them to increase production. The net result of this discussion was to make clear that the needs of the situation were the dissemination of information, the fostering of mutual acquaintance and the encouragement of a spirit of enquiry, industry and experiment. No tangible results were accomplished in the way of furnishing facilities for meeting these needs beyond the organization of societies where these matters were discussed. The century was thus a period of incubation of ideas which soon began to express themselves in material form.

Chapter III.

JOURNEYMAN'S ESTATE.

Early in the nineteenth century the ideals of vocational education began to take material form. In 1796 the Massachusetts Agricultural Society began to publish its proceedings which developed in 1814 into the Massachusetts Agricultural Repository and Journal. The first volume of the transactions of the New York Society for the Promotion of Useful Arts appeared in 1801. For some years these associations published frequent notices and reports in the daily papers. As the demand for technical knowledge increased, trade journals were established. The American Farmer was founded in Baltimore in 1819. The New England Farmer (Boston, 1823), the Country Gentleman (Albany, 1834), the American Cultivator (Boston, 1839), the American Agriculturist (New York, 1842), and the Scientific American (New York, 1845), are still meeting the need that brought them into being.

That the demand for general enlightenment was also increasing is evident from the development of newspapers and periodicals. In 1689 the only paper in America appeared monthly, "thirteen months behind with the news beyond Great Britain." The eagerness of the people for information made possible the Daily Advertiser of Benjamin Franklin Bache in 1784. By reducing the price to one cent the New York Sun, in 1833, brought the daily newspaper within the reach of all. Now more than 2,500 dailies and 20,000 weekly and monthly periodicals are published regularly in the United States alone.

In 1810, another project for educating the people was inaugurated by Elkanah Watson in Pittsfield, Mass. He exhibited a pair of imported merino sheep in the market place and found that they were the objects of much interest and discussion. This led him to organize an industrial exhibition, where country folk might study the best products of the State and learn of new labor-saving inventions and methods of cultivation. The venture proved a great success. More than 2,000 attended and the educational value was so evident that Watson appealed to John Adams to help him secure funds to finance other projects of the same sort. But evidently the "Father of the public schools" saw little educational worth in a festival which so

little resembled a conventional school, but he replied: "You will get no aid from Boston; commerce, literature, theology, medicine, the university, and universal politics are against you." In spite of the weight of this opposition to the county fairs, they soon became the most important annual event in every community. In time the idea extended to such exhibitions as those of the American Institute (incorporated in New York in 1828), and of the national and State agricultural societies. The Centennial Exhibition of 1876, the first international fair held in the United States, was attended by 9,892,625. The Panama-Pacific Exposition of 1915 had 18,871,957 paid admissions. Who shall say which has contributed more to the enlightenment of the American people—these county, State, national, and international exhibitions, or the "literature, theology, medicine, university, and universal politics" that were against them?

Along with this growing enlightenment of the colonists came the gradual recognition of the fact that industrial independence could be secured only through an industrial efficiency comparable with that of the foreign manufacturers. At this time the use of machinery and the factory system had progressed much further in England than it had here, and this gave the mother country an advantage, which she sought to retain by forbidding the exportation of machinery and the emigration of skilled workmen to America. Therefore, in 1788, Tench Coxe, a manufacturer of Philadelphia, at his own risk and expense, made a contract with an English mechanic resident in Philadelphia to return to his native country and secure brass models of the Arkwright machines. The models were to be sent to France and reshipped, with the cooperation of Thomas Jefferson, then American minister in Paris. The attempt failed; the models were seized and the agent arrested. Thereupon Mr. Coxe inserted an advertisement in a Philadelphia paper offering a reward for the introduction in this country of improved cotton machinery. This advertisement attracted the attention of Samuel Slater, who had worked in the Arkwright factory.

Disguised as a sailor Slater escaped to America, where he succeeded in making from memory satisfactory reproductions of the foreign models. The "old mill" which he established at Pawtucket in 1790 was the first successful textile mill driven by water power in America. The enterprise paid from the start, improvements followed one another in rapid succession, and the manufacture of cotton cloth was soon on a firm basis.

The invention of the cotton gin by Eli Whitney in 1793 gave further impetus to the textile industry and was the means of making cotton growing the chief industry of the South. Steam was first used as the motive power for textile mills in 1810.

In other industries the spirit of invention was active. Oliver Evans devised the first machinery for flour mills in 1787. Among the patents issued in 1790 was one for nail-making machinery. In 1791 machinery for thrashing grain was patented. Nicholas I. Roosevelt built a double steam pump with a capacity of 3,000,000 gallons a day for the Philadelphia water works in 1800. The first high-pressure steam engine of Oliver Evans appeared in 1801. Six years later Fulton made his famous trip up the Hudson in the *Clermont*. When anthracite coal was discovered it was considered good for nothing but gravel footwalks, until 1812, when Joseph Smith, the inventor of the iron plowshare, thought of burning it over a grate, which made possible a stronger draft. Among other interesting patents of the period may be mentioned the screw propeller (1807), soda water (1807), the hot-air furnace (1808), and metal pens (1810).

In 1816 a committee of Congress urged the establishment of a national university, on the ground that "if American invention, unassisted, as it has been, already excites the astonishment of Europe, what may not be expected from it when encouraged?"

The War of 1812 was caused mainly by England's efforts to control American trade in the interests of British manufacturers. The embargo and the nonintercourse act, however, gave the domestic manufacturers a virtual monopoly of the home market for a period of seven years. This threw the country on its own resources, and, since commerce was crippled, turned the attention of all to the development of home industries. The effect may be seen in the textile industry, for example, where the number of spindles in cotton mills increased from 8,000 in 1807 to 500,000 in 1815 and the number of employees from 8,000 in 1811 to 76,000 in 1815.

The development of industries made transportation routes necessary. William Penn in 1690 proposed joining the Schuylkill and Susquehanna Rivers by a canal. Work was finally begun in 1793 and completed in 1827, in time to compete with the railroad. The Santee Canal in South Carolina was begun in 1786 and finished in 1800. The Middlessex Canal, joining Boston with the Merrimac, was building from 1793 to 1803. These early canals were the work of foreign engineers.

Albert Gallatin, Secretary of the Treasury under Jefferson, published an elaborate plan for national roads and canals in 1808, but the project was frustrated by the war with England. The Erie Canal, the first great pioneer work of American engineering, was built 1817-1825. By it the time from Albany to Buffalo, a distance of 363 miles, was reduced from 20 to 10 days. It was executed by three American judges—James Geddes, Benjamin Wright, and Charles Brodhead—who had had no formal technical training.

They felt their way along, working out each problem as it came with energy and determination. What they did not understand, they conquered by diligent study, unwearied zeal, and sound common sense. By the constant exercise of these qualities they laid the foundations of the profession of civil engineering in the United States.

This industrial activity was accompanied by an ever-increasing demand for further enlightenment concerning applied science and for better practical training for workers. State legislatures and the Federal Congress, however, were slow to recognize their responsibility in this matter. Washington's proposal for a national board of agriculture received but scant attention in Congress. In the Pennsylvania Legislature a bill to give a State subsidy to county agricultural societies had lain on the table since 1798. In 1817 a bill was introduced into Congress authorizing the establishment of a national board of agriculture with distinctly educative powers, but Congress failed to pass it. The next year the Columbian Institution for the Promotion of the Arts and Sciences was organized at Washington by voluntary action of interested citizens for the purpose of collecting products of various kinds, of publishing discoveries, of gathering information concerning geology and agriculture, and of keeping a statistical history of various localities as to products, imports, and exports, and of publishing an annual report on these subjects.

The first State to recognize its obligation to assist in the practical education of artisans was New York. In 1819 the legislature at Albany appropriated \$10,000 a year for the support of county societies for the promotion of agriculture and domestic manufactures. Similar legislation was passed in Pennsylvania in 1820. These efforts did not, however, satisfy the growing demand, and in 1823 Jesse Buel, chairman of the committee on agriculture of the New York State Legislature, reported a bill calling for the establishment, at public expense, of a State school of agriculture.

This report begins by saying that since agriculture is the basis of all industry, it should be elevated to the rank of a liberal and fashionable study. This can be done with the help of science. Such a school should consist of: (1) a pattern farm; (2) an experimental farm; (3) a manufactory of implements; (4) a school of industry where the poor may receive a good education in agriculture and mechanic arts; (5) a boarding school for children of affluence; (6) an institution of agriculture, theoretical and practical.

Such a school would be of great benefit (1) to agriculture; (2) to commerce and manufactures, because of increased products of agriculture; (3) to the morale of society, because ideals of industry and sobriety would be fostered; (4) to the State revenues, because of increased canal tolls; and (5) to political institutions, because intelli-

gent farmers are the best citizens. Such a school is not a utopian dream since one has been conducted for a number of years with great success by von Fellenberg at Hofwyl in Switzerland. The conditions here assure us that a school of this type would meet the needs of America.

The interest in this report centers about the fact that it describes so clearly the kind of school that seemed to be needed in the country at that time. The Fellenberg school at Hofwyl, which is here mentioned as the best model to follow, derived its methods from Pestalozzi, whose educational principles are these: 1. An all-round training must be given. 2. The nature of the pupil must determine all the details of his education. 3. "Work in general is the surest of all exercises for the attention, and man is much more truly educated through that which he does than through that which he memorizes." Knowledge without the ability to apply it is a "fearful lot for a human being." 4. The method of learning must primarily be based upon the analysis of experience. "Put the student on the road which the discoverer of the subject himself took and had to take." 5. "We get our knowledge by our own investigation and not by endless talk about the results of art and science." 6. Organization and correlation of experiences are necessary.

The Buel report closes with the words: "The Honorable Stephen van Rensselaer has offered a gratuitous deed of lands required for the use of the institution." The State legislature was, however, not yet ready to take so progressive a step, and the proposed bill was not passed. The next year van Rensselaer wrote to the Rev. Samuel Blatchford:

I have established a school at the north end of Troy . . . for the purpose of instructing persons who may choose to apply themselves in the application of science to the common purposes of life. My principal object is to qualify teachers for instructing the sons and daughters of farmers and mechanics . . . in the application of experimental chemistry, philosophy, and natural history to agriculture, domestic economy, the arts, and manufactures. From the trials which have been made by persons in my employment . . . I am inclined to believe that competent instructors may be produced in the school at Troy, who will be highly useful to the community in the diffusion of a very useful kind of knowledge, with its application to the business of living. Apparatus for the necessary experiments has been so simplified . . . that but a small sum is now required as an outfit for an instructor in the proposed branch of science; consequently every school district may have the benefit of such a course of instruction about once in two or three years, as soon as we can furnish a sufficient number of teachers. I prefer this plan to the endowment of a single public institution, for the resort of those only whose parents are able and willing to send their children from home or to enter them for several years, upon the Fellenberg plan. It seems to comport better with the habits of our citizens and the genius of our Government to place the advantages of useful improvement within the reach of all.

The founder also directed—

that with the consent of the proprietors, a number of well-cultivated farms and workshops in the vicinity of the school be entered on the records of the school as places of scholastic exercise for students, where the application of the sciences may be most conveniently taught.

The details of organization of the school were entrusted to Amos Eaton, a graduate of Williams College who had done graduate work in science under Silliman at Yale. The methods which he employed differed from those of other schools in three important ways:

(1) The pupil is given the place of the teacher in all his exercises. Being under the necessity of relying upon his own resources and of making every subject his own, he becomes an adept as a matter of necessity. (2) In every branch of learning the student begins with its practical application, and is introduced to a knowledge of elementary principles from time to time as his progress requires. By this method a strong desire to study an elementary principle is excited by bringing his labors to a point where he perceives the necessity of it, and its direct application to a useful purpose. (3) Corporal exercise is not only necessary for the health of students, but for qualifying them for the business of life. . . . Such exercise as running, jumping, climbing, scuffling and the like are calculated to detract from that dignity of deportment which becomes a man of science. Therefore . . . such exercises as land surveying, general engineering, . . . examining workshops and factories, watching the progress of agricultural operations . . . are made the duties of students for a stated number of hours on each day.

Prof. Eaton was always very insistent that this method of instruction was—

not Fellenbergian, nor Lancastrian, but purely Rensselaerean. The Rensselaerean scheme for communicating scientific knowledge had never been attempted on either continent until it was instituted at this school, two years ago. Many indeed mistook it, at first, for Fellenberg's method; but its great superiority has now been satisfactorily tested by its effects.

It is perfectly clear that the Rensselaerean method, with its marked emphasis on motivated self-activity in achieving the mastery of things, was very different from the method in common use in the schools and colleges, with its enforced repetition of words and phrases. A careful analysis shows, however, that it differed from the method of Fellenberg only in the means that were employed to attain the ends described by the educational principles of Pestalozzi. Both aimed to give an all-round training in harmony with the nature of the student. Both sought to accomplish this by practical analysis of experience, personal investigation, and correlation. Both were thus striving, each in its own way, to give concrete expression to the same ideals of education for use.

The year 1824 witnessed the inauguration of another enterprise that has been of far-reaching usefulness to technical education. Samuel V. Merrick, a young man, 21 years of age, "without a mechanical education, with scarcely a mechanical idea," became the

owner of a workshop. He realized that "without knowledge he could not succeed; and that as a mechanic he was socially degraded, for in those days people despised mere mechanics." The mechanics on the other hand, refused him membership in their mutual benefit association, because he was confessedly not a mechanic. Although in 1816 Count Rumford had endowed at Harvard a chair in "the application of science to the useful arts," and although that same year the University of Pennsylvania had "created a new department to be devoted to the study of natural science," Merrick was unable to get the kind of instruction he needed.

In this dilemma he decided to establish a new institution that would meet his own needs. A similar effort had been made the previous year by Prof. Keating, who held the newly established chair of "chemistry in its application to agriculture and the mechanic arts" at the University of Pennsylvania; but this effort had failed. Fortunately, Keating and Merrick combined forces, and this combination of Merrick's need with Keating's knowledge proved effective. The Franklin Institute began its long career of usefulness. One of its first students, a bricklayer named Thomas U. Walter, became architect of the dome of the Capitol at Washington. Merrick himself became the first president of the Pennsylvania Railroad.

The objects of the institute were the promotion of science and the useful arts—

First, by the delivery of lectures on the arts and the application of science to them; second, by the formation of a library of books relating to science and the useful arts, and the opening of a reading room; third, by the examination of all new inventions and discoveries by a committee of learned and honorable men; fourth, by the publication of a journal to contain essays on science and art, specifications of English and American patents, etc.; fifth, by holding exhibitions of American manufactures and awarding medals to worthy workmen; sixth, by building a hall for the meetings of the institute and the use of the members; seventh, by collecting machines, minerals, materials, etc., used in the mechanic arts; eighth, by the establishment of schools in which should be taught architecture and mechanical drawing, chemistry applied to the arts, mechanics, and, if possible, of a high school for giving young men a liberal and practical course of education.

The Journal of the Franklin Institute was started in 1826. In it were published regularly the specifications of American patents until the Patent Office commenced to issue reports. It contains the only complete list of American patents since 1825. In 1820 the Society of Mechanics and Tradesmen of New York opened its apprentice school and library. The Maryland Institute of Baltimore (1825) and the Ohio Mechanics' Institute at Cincinnati (1829) are other similar schools of this period. At this time (1827) the public schools reached the low-water mark of their efficiency, and various movements aimed at their reorganization were set on foot.

During the first 25 years of the nineteenth century progress consisted in the achievement of the ideals that developed during the previous century through trade journals and magazines, county fairs, and several schools for training in the mechanic arts. The conception that training in agriculture and the mechanic arts should be elevated to the rank of a liberal and fashionable study had also taken shape and specific suggestions as to how this might be done had been presented to a number of State legislatures in the hope of securing public support. The young Nation had also finished its apprenticeship to foreign masters and achieved industrial independence. A national individuality was beginning to appear with well-defined attitudes and interests.

Chapter IV.

INDUSTRIAL REORGANIZATION.

The first important new project that gave opportunity for free expression of the national temperament was the building of the railroad. In 1812 John Stevens, of Hoboken, the engineer whose son later founded Stevens Institute, had presented to the New York State commissioners complete and detailed specifications for building and operating a steam railroad from Albany to Buffalo. Stevens later demonstrated that his plan was practical by building a steam locomotive that carried six passengers around a circular experimental track at the rate of 12 miles per hour. But his suggestion was laughed out of court as visionary by such keen and progressive lawyers and diplomats as De Witt Clinton, Gouverneur Morris, and Robert Livingston. The Erie Canal was built and opened for traffic in 1825. Seven years later the steam locomotive "De Witt Clinton" made its celebrated trial trip over the new line from Albany to Schenectady.

The Baltimore & Ohio Railroad, incorporated in 1827, began operations with horses for motive power. The line happened to pass through some property owned by Peter Cooper, then proprietor of an iron mill near Baltimore. Cooper had a vision of what might be if steam were used in place of horses. He also realized that the success of the road meant an enhanced value for his property. With characteristic American and engineering spirit, he determined to prove that locomotives could be made to do the work. His experimental model, the "Tom Thumb," built with crude tools, with rifle barrels for fire tubes in its boiler, weighed about 1 ton and developed about 1 horsepower. On one of its early trips, while Cooper was driving it, it fell in with one of the regular trains drawn by a "splendid gray horse." A race ensued in which Cooper slowly gained the lead until the belt on the blower broke; the steam pressure fell, and the horse won. None the less, he had demonstrated that the iron horse was practicable.

The directors of the South Carolina Railroad, then building, were debating this same problem and had made estimates on the relative cost of horses and of steam. Their chief engineer, Horatio Allen, who had visited England and studied Stephenson's engines, succeeded in

convincing them that even though their own estimates were as yet inconclusive, the probability of material improvement in the horse was relatively small, while in the case of the locomotive "the end is not yet." They unanimously elected to try steam.

The building of this road was typical of all railroad building in America. It was an uncertain venture at best. In England, the railroads followed the population, and a rich traffic was waiting for them on the opening day; there the companies could afford to build straight and level tracks, regardless of expense. But in America distances were long and population scattered. Capital and confidence were scarce. Profits depended on whether or not the population would follow the road. Hence, great economy was necessary, particularly in the original costs.

Even in the face of conditions such as these, Allen believed that it would be possible to build locomotives that could climb hills and round curves with safety. When the line cut a hill he did not tunnel through it, but ran around or over it. In other words, he constructed the best line possible for the money available and then devised a locomotive that was powerful enough to master the grades and flexible enough to operate successfully on a rough and sinuous track.

Thus the problem of the railroad in America was solved by first adapting the track to the country and then adapting the engine to the track. This solution divided the responsibility between the civil and the mechanical engineer. It has been a powerful incentive to the development of the technique of road and engine building and to the growth of the professions of civil and mechanical engineering.

Many of the civil engineers who built the railroads were trained in field work on canals. Prior to 1840, Rensselaer had graduated 151 men. Of the first thousand cadets at West Point, 150 became engineers, many of whom were prominent in early railroad work. On the other hand, those who built the locomotives had no formal technical training. John Stevens and Horatio Allen were graduates of Columbia. But Peter Cooper, Phineas Davis, Ross Winans, and William Norris, who developed the motive power for the Baltimore & Ohio, and Thomas Rogers and M. W. Baldwin, heads of the locomotive works bearing their names—these men who contributed most to the development of the locomotive—were educated beyond the grammar school entirely in the school of experience. Yet so ingenious was their adaptation of means to ends that within 15 years of the first beginning they had laid the foundations of American locomotive practice. On the lines which they marked out the puffy, pokey, smoking rattletrap of 1832, whose limit was 15 tons 15 miles per hour, and whose starting "jerked the passengers from under their hats" has grown into the silent, swift, and powerful leviathan of to-day.

Although the main principles of American locomotive practice were determined by 1846, three important mechanical inventions since then have added much to the comfort and safety of travel. These are the Pullman car (1864); the Westinghouse air brake (1869); and the Hall automatic block signals (1871). Since these were all the work of men who had no formal technical schooling, it is clear that transportation by machines—the engineering achievement that lies at the basis of our whole industrial fabric—was accomplished before engineering schools had really begun to train men for the work.

The difficulties that the early builders of railroads had to overcome were not limited to the scaling of mountains and the building of tracks and locomotives. They have had to educate the educators. Thus, in 1829 the guardians of education in the persons of the school board at Lancaster, Ohio, seriously considered the propriety of using the schoolhouse for the discussion of such a question as whether the railroad was practical or not. They said:

You are welcome to use the schoolhouse to debate all proper questions in, but such things as railroads are impossibilities and rank infidelity. There is nothing in the Word of God about them. If God had designed that His intelligent creatures should travel at the frightful speed of fifteen miles an hour, by steam, He would have clearly foretold it through His holy prophets. It is a device of Satan to lead immortal souls down to Hell.

Simultaneously with the building of the railroads, there was developing in Virginia another application of the forces of nature to the convenience of man at the hands of Cyrus Hall McCormick. The son of a farmer, with only a few years of elementary schooling, he devised and constructed in 1831 a machine that by 1860 was saving the country \$55,000,000 per year. So important was this invention that the French Government decorated him as an officer of the Legion of Honor for "having done more for the cause of agriculture than any other living man."

Greater speed in harvesting made possible larger farms than could be had in the East. This made necessary the extension of the railroads and resulted in the opening of the West. The railroads were still further developed to ship the farmer's products East again. Thus the railroads followed the reaper. Together they have been the chief factors in the industrial upbuilding of the Nation. But the making of locomotives and of harvesting machinery has always been almost entirely in the hands of men who have not graduated at engineering schools.

The railroad and the reaper were, however, not the only expressions of the engineering spirit in the country. Before the Centennial Exhibition of 1876, more than 100,000 patents had been issued, and the exhibition itself bore witness to their variety and their labor-

saving utility. Among the most important may be mentioned the telegraph, by Joseph Henry and S. F. B. Morse (1842); the sewing machine, by Elias Howe (1846); the rotary printing press, by R. M. Hoe (1846); structural iron beams, by Peter Cooper (1854); the typewriter, by Charles Thurber (1843); vulcanized rubber, by Charles Goodyear (1844); passenger elevator, by E. G. Otis (1852); and the Corliss engine (1850).

These and many other less striking innovations changed the entire nature of American domestic and industrial life in the 50 years from 1820 to 1870. The revolution wrought in domestic life has been frequently described and need not here be mentioned. For this discussion the important changes were those wrought in the distribution of the workers among the various "gainful occupations of benefit to themselves and to the commonwealth." These changes are shown in the following table:

	Number of workers per 1,000.			Rate of change per 1,000 per year.		
	Agriculture.	Manufactures, trade, and transportation.	Professional and personal service.	Agriculture.	Manufactures, trade, and transportation.	Professional and personal service.
1820.....	830	170	.....	- 2.75	+1.00	.....
1840.....	775	190	35	-10.00	+4.13	+5.83
1870.....	476	314	210	- 3.08	+4.20	- .52
1910.....	329	482	189			

The above figures show clearly the acceleration which the railroads and the reaper produced in the industrial reorganization of the country. In the 20 years prior to 1840 the drift away from agriculture into other pursuits had been taking place at the rate of 2.75 per 1,000 per year. But in the next 30 years this drift was nearly four times as great. More than half of those who sought other occupations than agriculture during this period are classified in 1870 in the personal service group—domestic servants, hotel keepers, waiters, laundresses, nurses, barbers, bootblacks, and the like—a striking proof of the changes produced by machinery in the habits of domestic life. The majority of the other half entered the rapidly developing fields of manufacture, trade, and transportation.

Since 1870 the proportion of the workers engaged in the personal service group has remained constant, and the drift from agriculture to commerce and manufactures has continued at a constant average yearly rate. In other words, the general outlines of the industrial reorganization were determined before 1870. Since then the material progress of the Nation has consisted in the gradual perfection, sublimation, intensification, and expansion of the tendencies there expressed.

Up to 1870 the engineering schools of the United States had graduated less than 900 students. The census report for that year gives the number of engineers in the country as 7,374. Hence at that time certainly not more than one out of every eight practicing engineers was a college graduate. Therefore the engineering colleges exerted relatively little influence in laying the foundations and determining the general outlines of the industrial reorganization. They seem to have been the consequences rather than causes of the transformation.

Evidence of the justice of this conclusion has already been presented in the story of the founding of the societies for the promotion of useful arts and of the Franklin Institute. The proceedings of these institutions are full of discussions of the new problems that were met in the development of industrial projects. Though the solutions often strike one now as rather crude, they worked. Manufactures flourished and money became plentiful. The tariff was raised, the national debt paid, and there was a surplus in the Treasury. Congress had begun (1836) to distribute this surplus among the States for purposes of education and internal improvements when the panic of 1837 brought the financial game to a sudden halt.

On the other hand, farms continued to yield a gradually diminishing crop per acre, showing exhaustion of the soil. Twenty years before the United States had been exporting some \$14,000,000 worth of breadstuffs annually, but in 1837 it was necessary to import about \$8,000,000 worth. The decrease in value of farm products was estimated at 10 cents per acre per year, or about \$10,000,000 per year for the whole country. Old farms in the East were being deserted either for virgin farms in the West or for manufacturing enterprises.

It is not surprising, then, that efforts to secure public support for schools of agriculture and mechanic arts were renewed at this time. In Pennsylvania the Franklin Institute presented a petition to the State legislature on December 7, 1837, praying for the establishment of a State school of practical arts. Such a school had been part of the original plan of the Institute, finances had not yet permitted of its realization. The legislature was besieged by memorials from all parts of the State urging favorable action on this petition. Similarly in New York the legislature passed an "act to incorporate the New York State Agricultural School" in 1836. The act carried with it no appropriation but left the support of the institution to private subscription. When this project failed, an "act to encourage agriculture" was introduced (1839) which carried with it an annual appropriation of \$20,000 for the support of the local agricultural societies and a State board of agriculture. This act called forth a deluge of petitions in its favor from all parts of the State. None of these efforts led to the establishment of schools.

The Smithsonian bequest of \$500,000 "for the increase and diffusion of knowledge among men" was accepted by Congress in 1836. To the friends of industry this seemed to offer a possibility of establishing a national agricultural school, for several memorials were sent to Congress urging the use of at least part of the fund for the "increase and diffusion of agricultural knowledge." In 1841, a national convention was called in Washington to organize the United States Agricultural Society for the purpose of securing this bequest for a "great school and library of agricultural science and experiment with a garden that should be worthy of the name of Smithson." But a committee of the House had reported in 1840—that the declared object of the bequest of James Smithson to the United States of America being the foundation, at the City of Washington, of an establishment "for the increase and diffusion of knowledge among men," no appropriation of any part of the fund to the purpose of educating the children or youth of these United States would fulfil the intent of the testator.

The establishment of an astronomical observatory was recommended, and the United States Agricultural Society faded away.

This report was not approved by Congress and the question was referred (1846) to a new committee whose chairman, Robert Dale Owen, had been educated at the Fellenberg school at Hofwyl. This 1846 report states that "Whereas the general diffusion of knowledge may be accomplished most effectively through the common schools; and whereas knowledge may be essentially increased by scientific research and by spreading a taste for science and the arts," therefore the fund should be used to establish a school. This school should support—

a professor of agriculture, a normal department, a professor of common school instruction, and such other professors, chiefly of the more useful sciences and arts, as may be necessary for such a thorough scientific and liberal course of instruction as to qualify men for teachers of the more important branches of science.

It should not have "any school of law, medicine, or divinity, nor any professor of ancient languages." Congress, however, felt the impropriety of utilizing the bequest of a foreigner to relieve these United States of the "solemn and indisputable obligation incumbent on parents and guardians" of properly educating their children. Twenty years later the land-grant colleges were established at public expense, and their subsequent development along the lines of this report has demonstrated its far-sighted wisdom.

Since Congress also believed that "the Government can not, without violating the principles on which it rests, become . . . a censor of any department of the press, an arbiter of science, or a publisher of works of mere literature or philosophy, any more than of morals or theology," the functions of the Smithsonian Institution

were finally defined in an act (1846) that was a careful compromise among the claims of a library, a museum, a research institution, and a publishing center.

While these efforts for education in agriculture and mechanic arts were making progress, another school movement with totally different aims and ideals was developing in New England. Massachusetts and Connecticut, in 1837-8, created their State boards of education and called as their respective secretaries those two notable lawyers and legislators, Horace Mann and Henry Barnard. Having "abandoned jurisprudence and betaken themselves to the larger sphere of mind and morals," these two men went enthusiastically to work to lay the foundations of our system of public schooling at public expense. Curiously enough, as has been noted, the fact that the training of every one to some "gainful occupation" is one of the important justifications of taxation for public education was forgotten. The idea legalized in 1647, that the duties of the schoolmaster were merely "to teach all such children as may resort to him to write and reade, and to instruct youth so farr as they may be fited for the university" had then become an unquestioned and unimpeachable tradition. Therefore the two movements developed independently and have seemed until very recently quite incompatible with each other.

The 20 years from 1837 to 1857—the age of the "Forty-Niner"—have been called the "Golden Age." In this brief period the total wealth of the country quadrupled, and the per capita wealth more than doubled. The Federal treasury overflowed, the tariff rates were lowered and reduced by Walker to a strict business basis, and industry flourished on every hand.

This unprecedented prosperity and expansion of the mechanic arts made the need of more definite and accurate knowledge of science so apparent that Congress began at last to recognize the demand. Thus in the early years of steam traffic there were so many disasters due to boiler explosions and fires that a Federal investigation was demanded. The report (1838) lists 256 such accidents, which had resulted in 1,704 killed and 480 injured. Profs. Silliman and Olmstead, of Yale, were consulted in the matter and an effort was made to suggest provisions for greater safety of construction. The general conclusion was that accidents were not due to faulty construction of machinery so much as to ignorance and carelessness of those in charge. This led to the establishment of the system of Federal inspection of steamboats and the licensing of masters and engineers.

In 1839 the Commissioner of Patents was given an appropriation of \$1,000 for the purpose of publishing statistics of crops and such other information as seemed likely to promote agriculture. This

appropriation was gradually increased as the propaganda grew in popularity. Petitions for the appointment of a special commissioner of agriculture and the establishment of a bureau of agriculture began to appear in 1840, but the bureau was not established until 1862. The present Department of Agriculture, with a Secretary of Cabinet rank, was created in 1889.

It is not possible to read the memorials and petitions that were submitted to Congress at this time without noting a gradual change in their tone. The earlier ones, like those of Walter R. Johnson and Charles L. Fleischman (1838), urge Federal support of a school of applied science, because such an institution will prove a public benefactor by assuring better crops, increasing the public wealth, and making worthy citizens. Some of the documents depict the beneficent results that will follow when agriculture has become a learned profession on a par with law, medicine, and theology. In other words, these early documents justify Federal support of schools of agriculture on the ground of the service such schools may render to the Nation.

Later memorialists, like John S. Skinner (1848), "feel that they have a right to demand for enlightening this great pursuit *at least as much* of the public treasure as is given for the support of naval and military schools now maintained for improvement in the science of war." Since the farmers "possess not the means of concentrating and giving expression to their views that other classes enjoy and on all occasions *so promptly exercise*," it is fitting that Congress should do something for the farmer, too. This argument proved finally effective with Congress.

The growth of the demand for public support of training in applied science is evidenced not only by the increasing number of memorials to Congress, but also by the activities in a number of the States. The propaganda was not limited to agriculture, but included also the other industries. Thus, in New York, in response to repeated petitions from the American Institute, the State agricultural societies, and from individuals, the House committee on colleges, academies, and common schools reported favorably on September 11, 1847, an act "for procuring an experimental farm, and to establish a workshop for experimenting in mechanical operations and a school for the promotion of agriculture and mechanic arts." This act failed to become law. Each year saw the proposition revived in one form or another, only to be rejected. State legislatures, like Congress, seemed to regard these efforts as the work of educational enthusiasts and were not yet persuaded that the farmers themselves really wanted such a school.

This conception was in the main true. For in spite of the progress that had been made in both agriculture and the mechanic arts

and in spite of the fact that many of the leaders of the time clearly recognized the fundamental importance of production for national life, there still harbored in the background of the public mind, the fact that taxation for education in the useful arts was connected with training of the children of the poor and that manual skill in the mechanic arts was in some way incompatible with the social position of a gentlemen. It therefore seems reasonable to suppose that the slowness of the progress in this educational movement was due to this general social atmosphere which has until very recently been powerful enough to hamper effectively the development of vocational training. In spite of the conclusiveness of the practical argument for such training, it has required a century of struggle to elevate agriculture and the mechanic arts to the rank of a fashionable study. This fact suggests that educational reform is not so much a matter of the technique of the schools as it is of the social instincts and intuitions of the people.

The period from 1825 to 1860 was therefore marked by the rapid expansion of industry and invention, the reorganization of social structure from an agricultural to a manufacturing type, and the increase in the respect paid to manual work. Several schools were established by private benefactions as mentioned in the next chapter. It was thus a period of winning fortunes and opening up the resources of the country and of inauguration of the age of machinery.

Chapter V.

THE FOUNDATION OF TECHNICAL EDUCATION.

The first financial support for a school of practical arts came from private benefaction. In 1847, Abbott Lawrence gave \$50,000 to Harvard for a school to encourage "the three great practical branches to which scientific education could be applied, viz: (1) Engineering, (2) mining, (3) manufacture of machinery." According to the deed of gift, "the sciences, investigating the properties and uses of materials employed in the arts; carpentry, masonry, architecture, and drawing are all studies which should be pursued in one or all of the principal divisions."

The same year that Lawrence made his bequest to Harvard (1847), the following notice appeared in the Yale catalog:

Profs. Silliman and Norton have opened a laboratory on the college grounds for the purpose of practical instruction in the applications of science to the arts and agriculture.

Prof. Norton was permitted to hold the chair of agricultural chemistry on condition that he should draw no salary. The short course in agriculture given by Prof. Norton attracted more than 500 farmers to New Haven for scientific instruction. Until 1860 this entire enterprise, the beginning of true university work in America, was housed mainly in the chapel attic, when the gift of Joseph E. Sheffield furnished a home and a name.

In both these institutions the scientific school was kept distinct from the "college proper;" the scientific student lived in a different building, had lectures and recitations in different rooms, was instructed by different professors, and was graduated at a different time and place. Nay, whether it was that young men taking scientific studies were considered as ipso facto lost souls, or as having no souls to be saved at all, they were not admitted to the students' seats at chapel—they were practically held as of an inferior order.

A third independent movement for the creation of schools of applied science came to a climax at the end of this period in the founding of the Massachusetts Institute of Technology. The principles on which this school was founded were formulated by William Barton Rogers, its first president, in two pamphlets, "Objects and Plan of an Institute of Technology" (1861), and "Scope and Plan

of the School of Industrial Science" (1864). According to President Rogers—

the productive talent of the community, as measured by its proficiency in the practical arts demands that *systematic training in the applied sciences* which can alone give to the industrial classes a sure mastery over the materials and processes with which they are concerned. Such a training has become indispensable to fit us for successful competition with other nations in the race of industrial activity in which we are so deeply interested.

In the institute there should be a "School of Industrial Science and Art" where—

persons destined for any of the industrial pursuits might secure such training and instruction as would enable them to bring to their profession the increased efficiency due to enlarged views and a sure knowledge of fundamental principles, together with adequate practice in observation and experiment, and in the delineation of objects, processes and machinery.

The teaching of science . . . is especially adapted to fulfill another, and in some respects a higher purpose by leading the thoughts of the practical student into those wide and elevated regions of reflection to which the study of nature's laws never fails to conduct the mind. Thus linking the daily details of his profession with the grander physical agencies around him, and with much of what is agreeable and ennobling in the contemplation of external things, it would insensibly elevate and refine his character and contribute to the cheerfulness as it aided the efficiency of his labours.

In putting this revolutionary doctrine into effect, it was inevitable that the habits and practices of the conventional college of the time should have been transferred to the new institution, for President Rogers had himself served 25 years as a college professor and all the members of the first faculty were men trained in standard colleges. For this reason, there seemed to be no incongruity in establishing an institute of technology with a faculty composed of men who, however progressive and high-minded they may have been, yet had no experience with engineering practice. Apparently it caused no misgivings to transfer the departments of mathematics, English, foreign languages and history bodily from the standard college to the new school and to require the prospective engineer to devote most of his time to these standardized subjects for two years.

It is to be noted that the origin of these early schools of applied science was totally different from that of schools of law and medicine. These latter were organized by practitioners as an outgrowth of the apprenticeship system; and they have always been controlled and maintained by men in active practice. But the schools of technology were organized by college professors who were eager to put science to use, but who lacked practical experience with industrial production.

The three schools that have been mentioned were privately endowed institutions. In the founding of State supported colleges of

practical arts the way was led by Michigan. The constitution of 1850 states that the legislature "shall as soon as practicable, provide for the establishment of an agricultural school." The school was finally opened in 1857. The prospectus says, "At the opening of the institution, a *System of Labor* and a *System of Instruction* must be adopted and they must be harmonized with each other." When the school was dedicated, May 13, 1857, Gov. Bingham declared that—

one of the highest objects to be attained by the establishment of an agricultural college is to elevate and dignify the character of labor. This can only be attained by an increased amount of knowledge, by making the laborer intelligent, so that an active, enlightened thought shall accompany the hand in guiding the plow and in all the various operations of the field.

This "Michigan idea" is distinct from the movement that was actively agitated from 1820 to 1840 for the introduction of manual labor in literary institutions. The latter regarded manual labor as essential for "invigorating and preserving health, without any reference to pecuniary profit," and was replaced later by college athletics. Michigan held "the grand idea that self-sustaining labor can go hand in hand with mental culture and refinement of taste" when it is "inseparably connected with the acquirement of knowledge. Thus allied, employment should be a charm instead of a drudgery."

It is significant that the first president of the Michigan Agricultural College, Joseph C. Williams, who formulated the ideals of the institution, was brought up in Massachusetts and graduated from Harvard in 1831. After 25 years' experience in the West, he saw, as he tells us in his inaugural address, that —

we have no guides, no precedents. We have to mark out the course of studies and the whole discipline and policy to be followed in the administration of the institution. There are numerous agricultural schools in Europe, but while an inspection would afford important vital suggestions, they would afford no models for us. The schools of Europe, in the nature of the case, must for the present be designed for the stewards, factors, and hirers of the soil, who use the laborers as serfs and instruments. In this country, the landlord, farmer, middleman, and laborer are united in the same man, the lord of his own acres, and by necessity he must have an education to suit his own fortunate condition.

The "Michigan idea" that manual labor is educative when it is inseparably connected with the acquisition of knowledge proved peculiarly appropriate to American conditions. It recognized that "the occupation of the farmer affords scope for thought" and utilized the "interest which studies and labor may be made to shed upon each other." Under these conditions "what students observe while at labor stimulates them to the study of principles" and the "pupil finds it to his educational advantage to work." On Saturdays, when labor is optional, "five-sixths of the students request it."

Because of its faithful adherence to these principles the Michigan Agricultural College became the leader in this field and an inspira-

tion to many other similar schools in the 30 years of experimentation that followed.

Although the agricultural societies in Massachusetts, New York, Maryland, North Carolina, Illinois, Iowa, and other States were vigorously discussing the subject and petitioning Congress and their State legislatures for funds for this purpose, Pennsylvania is the only other State in which an agricultural school supported by public funds was established before Congress gave serious attention to the matter. Here in 1854, the citizens of Center County raised \$10,000, the State agricultural society subscribed an equal amount, and land was purchased for a school near Bellefonte. The State contributed \$50,000 in 1857 and the institution opened its doors in 1859.

The first board of trustees explain that "the Farm School proposes to impart an education which is appropriate to the farmer—which educates his body to the *art*, as well as his mind to the *science* of farming." "Science, art, and labor must be combined" in an institution which "improves the mind of the agriculturist and trains his hands."

Dr. Evan Pugh, the first president, began his career as a blacksmith's apprentice. By dint of hard work he secured some elementary schooling and was able to spend four years abroad studying chemistry at Paris, Leipzig, Heidelberg, and Gottingen, where he took his Ph. D. degree. "Passionately fond of scientific research," especially in agricultural chemistry, he returned, enthusiastic over foreign school methods, to devote himself to the cause of agricultural education in America.

The aims of the new school are presented by Dr. Pugh under four heads:

First, as a purely educational institution, its course of instruction "not only affords the student the facts of science, but it disciplines his mind to habits of thought, and enables him fully to comprehend the abstract principles involved in the practical operations of life." Second, as a practical institution, the student must "be taught the practical applications in the field and laboratory of the principles he studies in the classroom; and manual labor is also necessary for the preservation of health and the maintenance of habits of industry." Third, as an experimental institution, "private laboratories, with means for investigation, will be fitted up for graduates of this or any other college in which to pursue prolonged, special scientific investigation." Fourth, as a means of protecting industrial interests, it will "diffuse a higher degree of intelligence and a more extended scientific knowledge among farmers" to protect them from "quacks, imposters, and ignorant empiricists."

This separation of the purely educational from the practical and the experimental was a foreign ideal that did not thrive in the environment to which it was transplanted. Being "taught the practical application in the field and laboratory of the principles studied in the classroom" did not furnish the stimulus given by the Michigan plan. Manual labor "for the preservation of health and the maintenance of habits of industry" was very unpopular with both faculty and students. After Dr. Pugh's untimely death in 1863 the force of his personal inspiration was gone, and the school rapidly became a "mere literary college." In 1880, a legislative committee made an investigation and the legislature voted—

to pay no more money to said Pennsylvania State College until it shall be satisfactorily shown . . . that the agricultural and mechanical interests of the State are receiving from such college actual benefits which are commensurate with the amount of money expended for its support and maintenance.

A reorganization "brought the college back into its legitimate pathway," and it has since prospered and grown strong, along with the other State college of agriculture and mechanic arts that followed the methods evolved from the Michigan idea.

The contributions of New York to this movement—namely, the subsidizing of the agricultural societies (1819), the Buel Report (1823), the Rensselaer Polytechnic (1824), and the American Institute exhibitions (1828)—have already been mentioned. While propaganda for the ideas thus expressed was continued with increasing enthusiasm, and although the governor's messages, the proceedings of the State Agricultural Society, the agricultural journals, and the legislative documents teem with appeals, petitions, memorials, and reports on this subject, nothing permanent was accomplished there until the founding of Cornell University in 1867.

Besides New York, Michigan, and Pennsylvania, two other States, Massachusetts and Illinois, played important parts in crystallizing the movement and securing financial support for it from the Federal Government. In 1850 the Massachusetts Legislature commissioned the Rev. Edward Hitchcock, president of Amherst College, to make a study of European agricultural schools. His report, presented the next year, is a mine of practical information concerning the methods of administration and instruction in foreign institutions of this kind. The chief conclusions of the report are:

Agricultural schools fail if they do not receive aid from the Government. Theory must be tested by practice. Professors of agriculture in colleges are not sufficient, but independent agricultural colleges are essential. At least one such superior institution is needed in each of our States. Agriculture should be taught in at least one academy in each county. A manual of agriculture for use in ele-

mentary schools should be prepared. By adding a single professor of technology and extending the collection of instruments, the agricultural school might become a school of mines as well as of commerce and manufactures, and thus afford education to the sons of the mechanic and merchant as well as the farmer. Provision should be made for ancient and modern languages which would "render the school more attractive and respectable."

This report of the Rev. Mr. Hitchcock was printed as a legislative document by the State and widely distributed. In 1851, a State board of agriculture was appointed and plans made for establishing an agricultural school at Springfield; but no permanent results were secured.

Meanwhile the men actively interested in the scheme, particularly Marshall P. Wilder, planned and organized (1852) the United States Agricultural Society which met annually in Washington. Its national exhibitions held each year in a different city were of far-reaching influence in extending the use of farm machinery, improving methods of farming, and arousing interest in agricultural education.

The prophet of the new movement in Illinois was Jonathan B. Turner, whose pamphlet on an Industrial University for the People (Jacksonville, 1853) is a stirring appeal for education of a new sort. Turner's propaganda exerted a wide influence then in securing Federal grants, but a deeper, more permanent significance attaches to his educational philosophy which has been strangely overlooked. According to his philosophy, mere learning, book knowledge, has been

considered the great end of education, and all such systems of culture direct the mind too much toward books, and too little toward facts. The pupil is taught to think of letters and words rather than of things and events. All the way along, from a-b, ab, and long a in hate, and a seven years' war at spelling up through spelling books, grammars, and dictionaries, English, Latin and Greek, till he at last took his diploma, it was one everlasting agonism at verblage, as though God, angels, and men—the sky above and the earth beneath, were all moonshine; and spelling, grammar, talk, were the only realities in the universe. A real, grammar-school boy of such schools, can brave no other idea than that God made the world out of the nine parts of speech, and in English, at least, spelled it all wrong. . . . This method does not produce *mind* but merely *learning*—not intellect but scholarship—not thinkers, but plausible and sophistical debaters; schoolmen (as of old) who can prove either side of any proposition, but not real men who can discharge the hard side of every single duty.

Having thus berated current school practices to his own satisfaction, Mr. Turner proposes a "plan for a State university." The administrative details of this plan do not strike the reader as novel, because they have long since been put into practice. On the other hand, the educational principle that should guide the methods of instruction seems even now to be striking and new because it has

been little understood and practised less. As has been said, present interest in this movement in Illinois centers entirely about it. In the words of Turner:

The most natural and effectual mental discipline possible for any man, arises from setting him to earnest and constant thought about the things he daily does, sees and handles, and all their connected relations, and interests. The final object to be attained, with the industrial class, is to make them *Thinking Laborers*; while of the professional class we should desire to make *Laborious Thinkers*.

This activity of Prof. Turner and the "industrial league of Illinois" resulted (1853) in the passage by the State legislature of resolutions demanding—

the passage of a law by Congress donating to each State in the Union an amount of public lands not less in value than five hundred thousand dollars, for the liberal endowment of a system of industrial universities, one in each State in the Union, for the more liberal and practical education of our industrial classes and their teachers.

These resolutions helped to focus ideas that had been expressed many times during the nation-wide propaganda for education in agriculture and the mechanic arts. They were presented to Congress in 1854, were endorsed by various other State legislatures and by the United States Agricultural Society, which, in January, 1857, appointed a committee to bring them again to the attention of Congress.

To Justin S. Morrill belongs the honor of having led the movement to a practical issue whereby the needed financial support was secured from this Federal Government. Beginning in 1856, Mr. Morrill made two unsuccessful attempts before his efforts were rewarded with success by the passage of the well-known "first Morrill Act" of July 2, 1862. By the provisions of this act there was granted to each State 30,000 acres of public land for each senator and representative in Congress for the endowment of a college of agriculture and mechanic arts, provided the State would supply land, buildings, and equipment for the institution.

At the time that Mr. Morrill began his campaign there were 239 literary colleges giving instruction to 27,159 students. These were the main source from which the teachers for the new schools had to be taken. The teachers, therefore, came to their work saturated with the ideals of the standard colleges and regarded agricultural education with disdain. Joseph Henry, director of the Smithsonian Institution, well expressed the prevailing feeling when he said that agricultural education would "convert a scientific institution into a cow pasture." It is not surprising that when called to account they specialized in engineering rather than in agriculture. The engineering curriculum had already been reduced at the Rensselaer Poly-

technic Institute to the standard categories of instruction,—mathematics, chemistry, physics, etc. But these standardized forms had no significance for agriculture, and therefore a special treatment and a new point of view were necessary. Had it not been for the imperative public demand and for the vision of a few leaders like Williams and Abbott in Michigan and Turner in Illinois agricultural education might have been stifled and the new point of view might never have embodied itself in institutions.

The original act of 1862 states that the leading object of these national land grant colleges—

shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life.

Many different interpretations of this provision have been made and numerous educational ideas have been read into it. Mr. Morrill himself was often asked to define and explain it, but his replies were always general and diffuse. They indicate that his own conception changed as the institutions grew. Thus in 1857 he urged the establishment of these colleges because "the farmer and the mechanic require special schools and appropriate literature quite as much as any one of the so-called learned professions." But in 1880 he tells us that "the object of the law was not to injure any existing classical institutions, but to reenforce them and bring liberal culture within the reach of a much larger and unprovided for number of the industrial classes in every State." Still another interpretation is given to the bill ten years later when he says "they should be ready to offer all the learning demanded by any portion of the American people."

Mr. Morrill was not an educational expert. He felt keenly that there was some discrepancy between the educational needs of industry and the schooling supplied by the standard colleges. As an expert on ways and means, he devoted his energies to securing the financial backing required for a new venture in education. His eminent success in the undertaking has been justly recognized by attaching his name to this legislation, which has already proved of inestimable value to the Nation, and the end is not yet. These "Morrill Acts" furnished financial means, but did not define educational methods. They were clearly intended "to do something for the farmer" by furnishing funds with which to carry out the project of agricultural education without limiting the schools by a too detailed statement of the educational requirements. An adequate understanding of the educational meaning may be had only from a study of the ideas expressed in the propaganda which forced this

financial and administrative legislation. These ideas are traced in the foregoing pages. Their educational meaning is clearly summarized in the words of Professor Turner:

The most natural and effectual mental discipline possible for any man arises from setting him to earnest and constant thought about the things he daily does, sees, and handles, and all their connected relations and interests.

It thus appears that by 1860 a number of schools for training in industrial arts had been actually established and the educational principle that must guide in all such enterprises had been clearly formulated. Efforts at public support had been rewarded by the passage of the Morrill Act. The foundations of a distinctively American system of vocational education had been laid in spite of the fact that widespread social sanction for this type of training had not yet been won. Progress in this movement was notably accelerated by the Civil War, which dissolved many old prejudices and made clear the importance of industrial production and tool power in the development of national strength.

Chapter VI.

THE DEVELOPMENT OF TECHNICAL EDUCATION.

After the Civil War, technical schools were established at a rapid rate. The four schools of 1860 increased to 17 by 1870, to 41 by 1871, to 70 by 1872, and to 85 by 1880. Now there are 126 engineering schools of college grade of which 46 are land-grant colleges operating under the Morrill Act, 44 are professional schools in universities, 20 are attached to colleges, and 16 are independent. In 1870 the number of graduates of technical schools numbered three per million population, now they number 43 per million. In 1870 only about one out of every nine practicing engineers was a college graduate. Now about half of the practicing engineers are college graduates.

This progress has not taken place at a uniform rate. In the 30 years from 1870 to 1900 increase in the number of engineering graduates per million population took place at the average rate of 0.5 per year. Since 1900 this increase has been at the rate of two per year, or four times as great.

The new institutions did not win public recognition for a number of years. Several efforts were made to increase the Federal endowment of the land-grant colleges but Congress could not be convinced that these schools had as yet justified their existence until 1887 when \$15,000 a year was granted to each State for the support of an agricultural experiment station. In 1890, \$15,000 a year was granted to each State for the support of its land-grant college. These grants have since been increased to \$30,000 yearly for the agricultural experiment stations and \$50,000 yearly for current expenses. Recently the Federal Government has recognized the importance of this type of work by the passage of the Smith-Hughes Acts which carry with them an ultimate appropriation of \$14,000,000 a year for the further extension of vocational training under the direction of the Department of Agriculture and the Federal Board for Vocational Education. These bills extend for the Federal support to secondary education and are proving effective in infusing real life into the work of the lower schools.

The slow development of instruction in applied science from 1864 to 1894 is attributable in large measure to the opposition manifested

by the colleges, which sought to maintain the social traditions of the past. In spite of the fact that the fundamental courses were practically the same in both the colleges of liberal arts and the technological schools, the former assumed a very illiberal attitude toward the more practical forms of instruction. In the long run, however, the claims of the arts colleges for a vague and abstract culture and mental discipline were no match for the concrete achievements of science. Backed as it was by the fruits of its labors in the form of increased production on the farm, better conditions of living and more comfortable modes of transportation and communication, science finally achieved recognition in the public eye. Once this recognition had been achieved, agriculture and the mechanic arts became "liberal and fashionable studies" and their further progress was assured.

In the first half of this period, these schools specialized in ordinary college work and instruction in engineering and the mechanic arts. In these lines there had been established definite methods of procedure which were easy to follow and which did not conflict too violently with the conventional college programs. Mathematics, physics, chemistry, mechanics, foreign languages, English and history could be taught by the same methods that were prevalent in the regular colleges. Hence they would pass muster as furnishing the type of mental discipline which was considered to be the ultimate aim of college instruction. In agriculture, however, these standard courses were not appropriate for the simple reason that as ordinarily taught they had no obvious connection with agricultural pursuits.

About 1895, having won the social sanction that was necessary for their development, the agricultural colleges began to expand rapidly. The "Michigan idea," that a suitable combination of learning and labor would yield mental culture and refinement of taste as well as increased production and practical skill, now had opportunity to express itself on a wide scale. New courses designed to fulfil the implications of this idea were developed in agricultural chemistry, soil physics, botany, zoology, and animal husbandry. Short courses and extension work were organized to bring the new knowledge and culture home to the farmers. The number of students in agriculture increased from 3,000 in 1894 to 130,000 in 1914. Agricultural production soon showed the effects of this increased intelligence; larger and better crops were harvested, and State legislatures at once began to make more liberal appropriations for the support of these schools.

On the side of engineering and mechanic arts the schools developed in a less striking manner. Here the lack of connection between the class instruction and practical life was less obvious than in the case of agriculture so that the old habits that were carried over from the arts colleges in the methods of teaching these subjects were retained.

As new inventions were made and new fields of engineering developed, new courses of instruction were added and curricula were more and more specialized. At the beginning most of the engineering schools offered not more than four different curricula in what were then recognized as the standard branches of engineering. Now the schools offer more than 20 different curricula each specialized in some particular line. Then the student was required to carry only three or four subjects at a time, now he is often required to carry as many as 10 or 12. This process of accretion and specialization has resulted in curricula that are enormously congested and has loaded the student with an amount and a diversity of work that are more likely to confuse and mystify than to enlighten.

Throughout this phenomenal expansion of scientific activity and invention little attention was paid to methods of instruction. The fundamental conception embodied in the work of the early schools to the effect that engineering could best be taught by first drilling the student in theory and then showing him applications was consistently followed throughout. Until very recently no one seems to have thought of applying the "Michigan idea" or the principles enunciated by Turner to such subjects as mechanics, chemistry, physics, or electricity. In this regard, the general outline of the curriculum of to-day does not differ materially from that of the engineering curriculum that was introduced at Rensselaer in 1849. The methods of teaching the fundamental subjects of mathematics, physics, chemistry and mechanics are practically the same as those in use 50 years ago. Very little effort was also made to develop in engineering and the mechanic arts short courses and extension work.

Whether due to this lack of obvious connection between the instruction in the early engineering schools and daily life, or to the general conditions of engineering practice, the fact remains that the progress in schools of this sort is far less striking than it is in the schools of agriculture. The total number of students in engineering and mechanic arts in institutions of college grade increased from about 11,000 in 1894 to 33,000 in 1914.

For a number of years practicing engineers have felt that the instruction in colleges of engineering and mechanic arts was not organized to meet the demands of the profession in the most satisfactory manner. This feeling found expression in the study that was made of these schools by A. M. Wellington, editor of the *Engineering News*, in 1892, and in the foundation of the Society for the Promotion of Engineering Education at the World's Fair in 1893. The feeling of dissatisfaction thus expressed gradually grew, until in 1907 there was appointed by joint action of the Society for the Promotion of Engineering Education and the National Engineering

Societies a joint committee on engineering education to make a thoroughgoing study of this subject. This committee secured the co-operation of the Carnegie Foundation, which liberally undertook to bear the expense of making the study, the report of which has recently been issued.

The greater portion of this report is devoted to a detailed analysis of the existing conditions in engineering colleges, a definition of the problems connected with engineering education, and suggestions as to the practical methods of solving them. In the general summary in the last chapter it is pointed out that the engineering profession is practically unanimous in the opinion that personal qualifications such as character, judgment, efficiency, and understanding of men are of greater importance in determining a man's success in engineering work than his knowledge of engineering science and practice. Hence the general conclusion is reached that the technical instruction must be given in such a way as to encourage the development of these personal qualifications as well as to insure thorough mastery of the technical knowledge. In order to accomplish this, it is suggested that greater attention should be paid first to obtaining the right emotional attitude of the student toward his work and to inspiring him with enthusiasm that will make him labor eagerly to accomplish it; and, second, to training him in habits of perceiving relationships so that he may acquire the power of grasping the essential factors of any situation and of reorganizing them to achieve the end in view.

The report indicates in considerable detail how these two fundamental aims may be achieved in actual school administration. For example, it is pointed out that the right emotional attitude of the student may be fostered by a better system of testing and grading. Most students know that under present conditions college grades do not always measure real ability and therefore they have not the same respect for them that they have for the records of the athletic field, which are obviously measures of achievement. Then, too, the almost complete dissociation of the work of the first two years from engineering practice makes it difficult for the student to realize that he is making progress toward the attainment of his ambitions. Shop practice when aimed at mere acquisition of skill does not appeal to his constructive imagination or release his creative energy. In the matter of perceiving relationships it does not help him if subjects like mathematics, physics, and mechanics are segregated in separate departments among which there is no interchange of ideas and no cooperation. Throughout the entire work the total disregard of the fundamental question of the relations between values and costs deprives the instruction of its most powerful means of securing both enthusiasm and a perception of relationships.

This analysis indicates that the difficulty with education in engineering and the mechanic arts lies in its failure to understand and appreciate the meaning of the fundamental conception of technical training which was so clearly stated by Jonathan B. Turner in his campaign for the establishment of an industrial university in Illinois in 1853. Turner's statement is that the "most natural and effectual mental discipline possible for any man arises from setting him to earnest and constant thought about the things he daily does, sees, and handles, and all their connected relations and interests."

The realization of this principle in school work requires that the student be kept in constant touch with practical industrial work and that this work be used as the source of the problems he solves in the classroom and the laboratory. Every student should therefore take an active part in productive work in the industries, the municipal activities, and the business and commercial operations about the school, not for the sake of winning a livelihood or of acquiring manual skill and technical knowledge alone, but also for the sake of opening his eyes to the problems that inspire men to creative efforts and lead them to wider visions and fuller mastery of the difficulties of existence.

During the past 10 years a number of individuals and individual schools have been making experiments for the purpose of applying the Turner principle in their regular work. Thus the principle is being applied to the general organization of the curriculum in the experiments at the Universities of Cincinnati and Pittsburgh and at the Massachusetts Institute of Technology. At these schools students in the regular engineering courses are required to spend part of their time under the supervision of the school in industrial plants. Instructors from the school visit the plant regularly to discuss with the students their difficulties. Each student is given a list of questions with respect to each job and is required to find the answers from an analysis of his work as it progresses. He thus acquires technical knowledge and skill under real working conditions and at the same time is impelled to "earnest and constant thought about the things he daily does, sees, and handles."

Because the time schedule at these three schools is very different the identity of their purpose in this experiment is apt to be overlooked. In reality, however, their experiences indicate that the same principle can be applied effectively in a number of different ways. It is to be hoped that schools will not attempt to reduce these experiments to a standardized form, which would enable institutions to adopt the form mechanically without due appreciation of the spirit of the underlying principle.

Besides these more general experiments, a number of individual instructors are trying to express the Turner principle in their class

work. Thus Prof. R. M. Bird, at the University of Virginia, and Prof. Max Goetsch, at the University of Cincinnati, have independently developed courses in chemistry in which the laboratory work does not consist of the ordinary routine series of exercises but of a series of projects which the student must work out by himself. While these projects involve a great deal of chemical analysis they are in the main synthetic. The student is not asked to analyze a given sample of baking powder, but rather is told to make baking powder and determine whether it is better and cheaper than any he can buy. Besides training the student to solve problems, this sort of work also introduces the question of values and costs and necessitates the consideration of market conditions. In like manner Prof. C. C. More, of the University of Washington, at Seattle, is experimenting with a course in mechanics in which the deduction of principles follows a large experience in solving practical problems in which the principles are used. Prof. More is now cooperating with the Chief of Engineers of the United States Army in developing a similar course for the training of Army engineers. Hence even though an engineering school is not yet ready to apply the principle to the general organization of its curriculum, a great deal can be accomplished in individual courses.

The application of the principle is not limited to the technical studies. Some years ago Prof. Frank Aydelotte organized a new method of teaching English literature at the University of Indiana. He has since continued the experiment at the Massachusetts Institute of Technology. In this work literature is not presented in the ordinary manner as something to be appreciated for its beauty whether it has obvious relation to daily life or not. Here the student is first asked why he came to college, why he wishes to be an engineer, how an engineer differs from a mechanic, what relations exist between engineering and science or between science and literature. In order to take intelligent part in such a discussion, the student finds it desirable to read numerous essays by such men as Huxley, Mathew Arnold, Carlyle, and Lowell. Because his reading is thus obviously along lines of connected relations and interests, it becomes significant and is pursued with enthusiasm and a real motive. History and economics may readily be treated in the same way and with the same success.

The striking success of short courses and extension work in agriculture has induced several of the State universities to turn their attention to similar work in the mechanic arts. Although much has been accomplished, the movement has not prospered as a whole, largely because of the vague sentiment among engineering-school faculties that work of this sort was not of college grade and therefore outside

the scope of their activities. Just before the war, this attitude showed signs of weakening and excellent work was actually inaugurated by several of the leading schools. If the experience in agriculture is any criterion, it seems reasonable to expect that the successful development of this field will bring no less bountiful public support than has the similar work for the farmer. The public has always been ready to spend money on education, provided the results are tangible and clearly worth while.

It thus appears that before the war considerable progress had been made at particular schools and by individual teachers toward realizing the purpose for which the land-grant colleges and engineering schools were established. The progress, however, was slow, because it was still hampered by the old college traditions and by the vestiges of the feeling that manual labor is unbecoming to a gentleman. After the experiences of the war, it is to be hoped that these vestiges of an ancient conception of culture will have totally disappeared and that the school of agriculture and the mechanic arts will be able from henceforth to achieve in freedom and with enthusiastic social sanction the purpose for which they were established.

Chapter VII.

THE FUTURE OF AMERICAN EDUCATION.

At the opening of the great war the country was confronted with the problem of creating a military establishment of unprecedented magnitude and power. It was necessary not only to raise and train an army, but also to organize the national industries so as to equip, transport and supply that army at maximum speed. The unanimity and enthusiasm with which the country grappled with this colossal task was a marvelous demonstration of our latent idealism, our creative imagination and our inherent strength.

As the mobilization of our Army and industries progressed, relatively little difficulty was experienced in filling the positions which required technical training and experience of a high order. But serious shortages of men skilled in the mechanical trades were soon apparent. It was not possible to supply the various Army organizations with the requisite number of machinists, carpenters, blacksmiths, automobile repair men and other technicians without seriously crippling the essential industries on which the equipment and supplies for the Army depended. The number of technicians needed was so much greater than the existing supply that the regular training facilities at night schools, technical institutes and the Army's own training stations were wholly inadequate to meet the demands. Hence the Government was compelled to create a new training system of its own in order that mobilization might proceed.

This training system was inaugurated by the War Department, in February, 1918, by the appointment of the Committee on Education and Special Training. The functions of the committee were defined as follows:

To study the needs of the various branches of the service for skilled men and technicians; to determine how such needs shall be met, whether by selective draft, special training in educational institutions or otherwise; to secure the cooperation of the educational institutions of the country and to represent the War Department in its relations with such institutions; to administer such plan of special training in colleges and schools as may be adopted.

The work of this committee was inaugurated by appealing to schools that had facilities for training in the mechanic arts to set up special short courses for soldiers. The men who took these courses

were inducted into the service by the Provost Marshal General and sent to the schools for two months of intensive military and technical training. During the eight months from April 6 to November 11, 130,000 men were trained at 147 schools in 67 different lines of technical work; 92,000 of these men had been assigned to Army organizations; about 70,000 had gone to France; and 38,000 were ready for delivery when the armistice was signed.

When the proposal was first made to the schools that they train unskilled men to be skilled mechanics in two months, it was universally declared that this could not be done. Yet because the country's need was great, many faculties patriotically agreed to attempt it. Since the time was short, it was not possible to furnish specific instruction as to the details of procedure. Instead, the trade specifications from the Army's occupational index, which define the duties and qualifications for every type of skilled workman required in the service, were supplied and each school was told to use its own ingenuity in training its quotas to meet those specifications. The suggestion was given that greater speed of training would be attained if instead of the ordinary methods of classified exercises a series of real jobs, each requiring thought and initiative on the part of the student were used.

This suggestion arose from the fact that in the Army all men are primarily soldiers for whom initiative, resourcefulness, quick thinking, ability to act intelligently in an emergency, and to utilize existing resources to accomplish unusual tasks are of the first importance. Therefore it seemed unwise to use the ordinary forms of vocational training which aimed primarily at securing dexterity in technical operations. The new system was designed to develop these personal qualifications of the soldier along with technical and manual skill.

Because of the novelty of this method of treatment, the schools took hold of the work with enthusiasm and there developed nearly as many different ways of training, for example, a blacksmith, as there were schools teaching blacksmithing. A system of active supervision was inaugurated under which each school was visited frequently by an expert in vocational training, and the most successful types of instruction in each line of work were carried by him from school to school. By this process of experimentation, supervision, and comparison of results, there was finally evolved a series of job sheets for each trade. These did not consist of directions for performing any operations, but rather of a series of questions, the answers to which must be worked out by the student on the actual job itself. In other words, the work was planned to realize as far as possible in practice the Turner principle of setting each man to constant and earnest thought about the thing he was doing.

The results achieved exceeded the fondest hopes of the committee. The universal testimony of the schools was that they had never seen students learn more thoroughly or with greater speed. The Army also was satisfied with the result as is evidenced by the fact that the committee was authorized to make contracts for the training of 220,000 more men during the winter of 1918-19. Had the war continued, 320,000 men would have been trained by June 30, 1919. A detailed report on this work has just been issued by the War Department.

While the success of this training must be attributed in considerable measure to the war spirit, there can be no doubt that the snap of the military training and discipline and the intrinsic interest of the work itself were also important elements in achieving the end sought. Certain it is that the military men agreed that the soldiers made as much progress in their military training during their two months' experience, in which only three hours per day was devoted to this purpose, as they did in the cantonments, where all their time was devoted to military work. In the same way many of the men who entered without skill with tools achieved in two months a degree of skill that was previously believed to require several years of training.

Before the work had progressed far another feature was added in the form of a course on the issues of the war. This was designed to furnish the soldiers the means of answering their many questions as to the reasons why this country was at war. There were occasional lectures, but in general the class time was occupied by discussion, in which the important facts concerning the origin of the war, the nature of the different Governments at war, the economic systems of the several nations, and their social conditions were freely argued. It was in no sense a propaganda for any one point of view, but an effort to supply information that would enable the men to answer their own questions to their own satisfaction. Later some 40,000 of the questions asked by the soldiers in the several schools were collected, classified, and organized under a number of leading heads with references to outside reading where the answers could be found. This was issued as a guide for conducting the course. It was designed to stimulate thought concerning the connected relations and interests of the things they were doing. It was evident that the students were enthusiastic about this work, because the classroom discussions were frequently continued in their barracks. Ninety per cent of the commanding officers heartily indorsed it, in spite of the fact that the time devoted to it was taken from the time allotted to military exercises.

Perhaps the most striking feature of this work was the fact that 130,000 men, who were selected by the draft machinery of the Provost

Marshal General without special reference to their technical skill, were received by the schools; and 130,000 men, each of whom was capable of some definite service, were delivered to the Army. This result was accomplished because every man was physically fit and because the attention of the school was focused first, upon defining accurately every job that had to be done; second, upon finding out what each man's special abilities were; third, upon allocating the jobs in accordance with the abilities; and fourth, upon developing those abilities to master the assigned jobs as rapidly as possible. Under this system progress was an individual matter. As soon as one job was finished, another was begun; and each man accomplished as many jobs as he was able to do well in two months. When the two months were finished, each man was placed as far as possible in a position in the service in accordance with his record of achievement at the school. To accomplish this, the schools used the same methods of sorting, rating, testing, and classifying men as were in use throughout the Army under the direction of the committee on classification of personnel.

In July, 1918, the plans for mobilization were extended and it became evident that great difficulty would be met in securing an adequate supply of commissioned officers to meet the requirements of the enlarged Army. Because the colleges had demonstrated their ability to train the kind of men that the Army needed, they were offered contracts for selecting and training the candidates for officers' training camps. The colleges gladly accepted this additional opportunity for national service. By order of the President a new division of the Army called the Students' Army Training Corps was created to serve as a reservoir for officer material. For convenience of administration, this corps was divided into a vocational and a collegiate section. Provision was made for the ready transfer of men from one section to the other or to officer training camps or to cantonments in accordance with their demonstrated abilities.

The Students' Army Training Corps did not have an opportunity to demonstrate its effectiveness. It was formally organized on October 1, but on account of the epidemic many of the schools were unable to begin work before October 20. It had then but three weeks of active life before the armistice was signed and demobilization became imperative.

The methods of training designed for the collegiate section of the Students' Army Training Corps were analogous to those used in the vocational work. The schools were given specifications as to the kind of knowledge required by Army officers in such subjects as map making and sketching, sanitation and hygiene, military administration and law. These first specifications were crude because of the brief time in which they had to be prepared. At the time of de-

mobilization experts were at work preparing more thorough specifications and gathering from army practice problems and subject matter that could be used advantageously in the training process. The underlying idea was to encourage the development of a system of training that would set each man to earnest and careful thought about the things he was doing.

Although the specifications of the courses were never completed, and although the time was too short to reduce the work to smooth running order, there were embodied in the organization of the Students' Army Training Corps several large conceptions which are of fundamental importance in the development of a national system of education. Prominent among these is the method of admission which was prepared but never used. Since admission to the Army is a privilege of every able-bodied citizen, it was obviously out of the question to limit admission to the Students' Army Training Corps by the ordinary methods of college entrance. On the other hand, some method of selecting those qualified to become officers was essential. Therefore, the committee devised a system consisting of a written application containing the past record of the student, a personal interview, and the standard Army intelligence test. Any boy who could qualify on these three grounds was to have been admitted without regard to his position in the ordinary scale of academic proficiency. If his academic achievement was not sufficient to enable him to carry the college work well, he could enter the vocational section first and be promoted as his abilities were demonstrated. With the assistance of the Committee on Classification of Personnel a system of selecting candidates for officers' training camps on the basis of demonstrated ability and of distributing the successful candidates among the several corps in accordance with their defined requirements was prepared but never used because of the demobilization of the corps.

By this system it was possible for any boy who was physically fit and over 18 years of age to enter the training system and continue until his commission was won provided he had the native ability and grit. Financial competency played no part because all the students were soldiers on active duty with pay and subsistence. No equally democratic system of selecting men for higher education has ever been established, and it is a matter of serious national concern that it could not be maintained permanently. Evidences are not wanting that some colleges may adopt similar systems of admission, but it will be a matter of great difficulty to solve the social and financial problems in a manner to guarantee the essential feature of this system, namely, education in accordance with ability without respect to family status or finances.

Again, the war-issues course, which has just been described in connection with the vocational training, was enlarged in scope and made a requirement of three class hours per week for every member of the Students' Army Training Corps. The proper administration of this course at any school required the cooperation of the departments of history, English, economics, sociology, and philosophy. Each of these contributed from its field of knowledge those elements that shed light upon the one problem of why we were at war. This unusual cooperation among departments has proved to be an inspiration for all concerned and nearly 300 of the 526 colleges that had units of the Students' Army Training Corps are continuing on their own initiative to give a course on modern, social, and economic problems designed after the model of the war-issues course.

Another fundamental conception of the Students' Army Training Corps was that of uniting all the institutions of higher education in a single enterprise for training for national service. For the time being the colleges forgot their individual differences. In the past academic standards, or denominational tenets, or self-culture have loomed large in the vision of many of the schools. It required a national crisis to focus their attention upon their one legitimate task of training for public usefulness. The 526 colleges were united by the Students' Army Training Corps into a single University of Uncle Sam, which constituted the first practical solution of the problem of a national university.

As has been shown in the previous sections of this bulletin, the country has been struggling since its origin to develop an educational system that expresses the American spirit. For 250 years progress toward the achievement of this ideal has been slow and halting. This Army training system may justly be regarded as the most complete realization that has yet been achieved of the education conceptions expressed in our national development and focussed in the Morrill legislation. While recent progress has been more rapid, especially in agriculture, the war experience has accelerated the movement and created a model that may safely serve as a guide for the future.

The two positive requirements of the Morrill legislation are "military tactics" and such branches of learning as will "promote the liberal and practical education of the industrial classes." As they were interpreted before the war both the "military tactics" and the "liberal and practical education" were administered in a manner well calculated to place fetters on individual initiative and creative imagination. The military training consisted mainly of close order drill and manual at arms with emphasis on implicit obedience to orders for three hours a week while on military duty. The liberal and practical education as a rule consisted of learning set lessons

and following directions in the execution of set exercises. Neither tended in any marked way to "set him to earnest and constant thought about the things he daily does, sees and handles" and hence both were in large measure incompatible with the American spirit.

In the war schools, conditions were very different. There the real jobs given challenged the ingenuity of the soldiers and released their creative energies in a struggle to win. The methods used were those the Nation has been struggling to secure ever since the Pilgrims landed on Plymouth Rock. The enthusiasm and the speed with which the men mastered the work together with the success of the training as shown by their records indicate that the methods used were compatible with the American spirit. Therefore those methods of training which proved so effective during the war may well be retained and perfected.

The conditions that must be fulfilled if the essentials of the war training are to be made permanent are these:

First, there must be some means of fostering the spirit of service. This was secured quickly in the war by the universal service law enforced in a thoroughly democratic manner through local boards. Perhaps some sort of required universal service may be needed to secure the same result in peace. Or perhaps it may be accomplished by a persistent campaign, like the food conservation campaign, carefully organized in every community and patiently sustained by intelligent cooperation of the schools. Congress will have to decide soon which method is to be followed.

In the second place, there must be some form of physical exercise and drill that result in fine physical set-up, good coordination, precision, promptness, self-discipline, and the instinctive habit of doing one's best under all conditions as a matter of course. During the war military training proved to be a most effective means for accomplishing these all important ends quickly and on a national scale. Perhaps there are other ways of securing this result, but the schools hitherto have not paid much attention to them, while military training makes the development of these qualities one of its first aims.

In the third place, the school work may be made far more impelling if it is organized in accordance with the Turner principle. The Army does this by analyzing carefully each job and leading a man to master it by a series of real questions, problems, and projects that the student must work out for himself. The activities of the household, the community, the State and the Nation may be treated effectively by this method. The humanities and the sciences lend themselves equally well to manipulation by it. When intelligently used it releases creative energy and fosters the development of initiative, resourcefulness, and freedom of thought. It is perhaps the most

direct method of securing motivation, of fostering powers of interrelation, and of impelling students to self-discipline and hard work.

Finally, the schools must recognize, as the Army has, that every citizen has abilities that render him capable of some useful service. It is one of the functions of the educational system to discover each individual's ability and develop it for useful service. The methods of rating, sorting, classifying, and placing men as developed by the Army are available for school use. As these methods come more and more into general use and as they are perfected the schools will gradually achieve a system in which ability rather than financial competency will be the entrance requirements for higher education.

These suggestions offer a solution to the ever-present financial problem. Now schools seem to be hopelessly twirling in a vicious circle, viz., we can not have better teaching till we get more money for teachers and we can not get more money for teachers till we get better teaching. The Nation has just spent billions of dollars for training for national service. This was done with an elimination of less than 3 per cent as unfit. Is it hopeless to imagine that when the schools adopt a plan of training that promises to deliver goods on a similar scale, there will be money enough to support it?

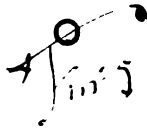
The achievement of these ends has been the ideal of the prophets of American education from the very beginning. These were the purposes which Benjamin Franklin sought to accomplish in the foundation of the Academy at Philadelphia in 1749. *Rennselaer Polytechnic* was founded to secure these results. They were the purposes which Abbott Lawrence sought to achieve in the foundation of the Lawrence Scientific School at Harvard. Joseph Sheffield made his bequests to the Scientific School at Yale with the same end in view. They were the conceptions back of the establishment of the Michigan Agricultural College and the Farmers' High School of Pennsylvania in 1855. They compelled the Morrill legislation which led to the establishment of the land-grant colleges. They have been expressed effectively in many ways in agricultural training; and in the mechanic arts they have been achieved most fully in the vocational training work of the War Department during the present emergency. They would have been attained with equal fullness in the collegiate work of the Students' Army Training Corps had this experiment lasted long enough to overcome the serious handicaps with which it was encumbered at the start.

The progress that was made during the war was possible because the management of the schools was centralized in a single organization under military control. Now that the necessity for military control has passed, there are about 80 different offices in Washington charged with the direction of 80 different aspects of national

education. The actual control of education is, however, vested in the several States and in a multiplicity of privately owned and managed institutions. Obviously progress would be accelerated if some co-ordination of these infinitely varied elements of control could be secured without impairing the local control by States and individuals.

In peace time this coordination could not and should not be brought about by autocratic methods but by voluntary cooperation of all concerned. What is needed to accomplish this is a Federal educational council or department of education or national university that would define the national problems of education, industry, economics, social and municipal organization, politics and commerce, and point out the lines along which fruitful solutions of these problems might be secured. Such an organization would be able to unify the school system, not by legal authority, not by the distribution of funds, but by the discovery and the allocation of tasks that ought to be performed in order to achieve the end sought.

The pressure of national peril is removed. If the war experience has served merely to stir our emotions profoundly without at the same time clarifying our thought, education will lapse into its formalistic, prewar condition. But if we interpret intelligently the concrete image that has been wrought in the schools by the war experience, and proceed to develop along the lines thereby suggested, education will advance rapidly toward the realization of a national school system which may safely serve as the bulwark of a lasting democracy.



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